

<400> 1058

Glu Phe Pro Ala Arg Val Thr Pro Val Ala Glu Gln Leu Gly Val Ser
 1 5 10 15
 Leu Thr Leu His Pro Asp Asp Pro Pro Arg Pro Leu Phe Gly Leu Pro
 20 25 30
 Arg Ile Ala Ser Ser Ala Glu Asp Tyr Gln Ala Leu Phe Asp Ala Val
 35 40 45
 Pro Ser Lys Ala Asn Gly Ile Cys Leu Cys Thr Gly Ser Leu Gly Val
 50 55 60
 Arg Ala Glu Asn Asp Leu Pro Glu Met Ala Glu Arg Phe Gly Pro Arg
 65 70 75 80
 Ile Ala Phe Ala His Leu Arg Ala Thr Lys Arg Asp Ala Asp Gly Leu
 85 90 95
 Ser Phe His Glu Ser Asp His Leu Asp Gly Asp Val Asp Met Val Ala
 100 105 110
 Cys

<210> 1059

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1059

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 120
 gccgacatcc tgatcgacga aggtttcacc ggtatcgagg aaatcgcta cgtcccatg
 180
 caggaactgc tggagatcga ggcgttcgac gaagacacca tcaacgagtt gcgcgcccgt
 240
 gcccgcaatg cgctgctgac cgaggccatc gcccgaggaag agcgccctga gaccgcgcag
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 360
 gtgcgtacgc gt
 372

<210> 1060

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1060

Xaa Leu Thr Gly Trp Gln Ile Asn Ile Met Thr Pro Glu Glu Ser Val
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 20 25 30
 Lys Leu Asp Val Asp Glu Glu Val Ala Asp Ile Leu Ile Asp Glu Gly
 35 40 45
 Phe Thr Gly Ile Glu Glu Ile Ala Tyr Val Pro Met Gln Glu Leu Leu
 50 55 60
 Glu Ile Glu Ala Phe Asp Glu Asp Thr Ile Asn Glu Leu Arg Ala Arg


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65              70              75              80
Ala Arg Asn Ala Leu Leu Thr Glu Ala Ile Ala Gln Glu Glu Arg Leu
              85              90              95
Glu Thr Ala Gln Asp Leu Leu Glu Leu Glu Gly Val Thr Pro Glu Leu
              100              105              110
Ala Ala Lys Leu Ala Glu Arg Gln Val Arg Thr Arg
              115              120

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<210> 1061

<211> 456

<212> DNA

<213> Homo sapiens

<400> 1061

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120
gagaaggagg attctggagc attgtatttg gcagccggag cgggcagtgg gcgggggggtt
180
gggacacgaa gggctcttcg gaccctgtg cctcttctgc cccaagggcg agaagacggg
240
cttcgcagcg accctcgggg gtccatggag ccgcctgcct tcgccccctc gctcttccca
300
ggtctgaacc tggatgggga gaagaaattg aagtgccttg gagacggggg ggcttaaaac
360
actagggagc ctcatcgccc agccttgggc ccactttcct ttcgatcgtg aggattccgc
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456

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<210> 1062

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1062

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Met Arg Leu Pro Ser Val Leu Ser Pro Pro Val Ser Lys Ala Leu Gln
1              5              10              15
Phe Leu Leu Pro Ile Gln Val Gln Thr Trp Glu Glu Arg Gly Gly Glu
              20              25              30
Gly Arg Arg Leu His Gly Pro Pro Arg Val Ala Ala Lys Pro Val Phe
              35              40              45
Ser Pro Leu Gly Gln Lys Arg His Arg Gly Pro Lys Ser Pro Ser Cys
              50              55              60
Pro Asn Pro Pro Pro Thr Ala Arg Ser Gly Cys Gln Ile Gln Cys Ser
65              70              75              80
Arg Ile Leu Leu Leu Leu Ser Ala Pro Lys His Leu Gln Pro Leu Leu
              85              90              95
Gly Leu Gln Lys Gly Phe Leu Glu Gly Ala Lys Gly Thr Phe Tyr Leu
              100              105              110
Ser Tyr Leu Pro Ala Gln Pro Gly Ala Met Glu Ser Arg
              115              120              125

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<210> 1063

<211> 3760

<212> DNA

<213> Homo sapiens

<400> 1063

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120
taaggcttta taactagtaa atatctgcat taaagaacga gttgaatgaa aattctgata
180
aattcctact taaagtgtat ccaaagaaaa cggaaaaagt ctaggagtta gtgatattag
240
attcagaaga atgagctttg taattcttaa aaattagtct cagaatagaa aggattttaa
300
aagtaattga gtaaagtcac aggaatgtg accatataaa ggaatggctc taaatgtatt
360
aatccagaag gaagcaacag gttaaacagt aagaggtaag aaacaaaaaa taaggaacga
420
gagagagaga gtgacaggga gagagagaca gagcggggaa ggagagaatg agaaggaaaa
480
tcaggaaaac gaggagaaac agaattaagg aggtgatact ggaatagtat cagaccattc
540
tgaatcaatt taagaattgc catgtctaata tcttatatgg aagatttgaa atacaaggat
600
attgaaagga ataacaaatt ataatgaatg catagaaatc cttatgtaat ccaaggatcat
660
taatttgaag gaagacatca agaaaatgtg atctagaaat aaagggtgag attgctccat
720
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780
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840
ttaaaaactta gtatattgat atccttcacc cactccagg aacgttcgct acgctaggac
900
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1020
gttgcacac agatgaaaaa gtaaggccga agaagaccag agaagagttg gttgaatgtg
1080
tagatataag atccatctgt gacattgtag aatgaaattt caccggcttc atagtccaag
1140
aaaatcccaa tgcagtgagg actttccagt tggagaagag gcactgatgg ggaggcaagg
1200
accatgtact cattcccttt cagcagccac agggcccaga cccattctc aggagatggc
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1320
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1440

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2160
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2760
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3060

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 3180
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 3240
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 3360
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 3600
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 3660
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 3760

<210> 1064

<211> 483

<212> PRT

<213> Homo sapiens

<400> 1064

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His	Gly	Ser	Pro	Ser	Cys	Thr	Leu	Arg	Ser	Ala	Val	Lys	Ser	Arg	
			20					25				30			
Leu	Gly	Cys	Ala	Val	Ala	Gly	Ser	Phe	Thr	Ser	Thr	Trp	Asn	Phe	
		35					40				45				
Leu	Lys	Ser	Ser	Leu	Leu	Pro	Gly	Met	Gln	His	Ala	Val	Phe	Ser	Ser
	50					55					60				
Met	Gly	Met	Phe	Ser	Ala	Ser	Ser	Leu	Val	Thr	Ala	Leu	Leu	Leu	Leu
65					70				75					80	
Arg	Thr	Pro	Leu	Thr	Pro	Ser	Ser	Arg	Pro	Arg	Ala	Gly	Arg	Trp	His
				85				90					95		
Leu	Ser	Cys	Ser	Ser	Ser	Ala	Ser	Ser	Phe	Arg	Ala	Leu	Leu	Cys	Trp
		100					105					110			
Thr	Ser	Arg	Leu	Leu	Leu	Ser	Arg	Ser	Leu	Cys	Ser	Val	Ala	Arg	Ser
		115					120					125			
Ser	Ala	Ser	Ser	Arg	Leu	Ser	Tyr	Gln	Val	Lys	Leu	Gln	Met	Ala	Leu
	130					135					140				
Glu	Leu	Met	Arg	Lys	Glu	Leu	Glu	Asp	Ala	Leu	Thr	Gln	Glu	Ala	Asn
145					150					155				160	
Val	Gly	Lys	Lys	Thr	Val	Ile	Trp	Lys	Glu	Lys	Val	Glu	Met	Gln	Arg
			165					170				175			
Gln	Arg	Phe	Arg	Leu	Glu	Phe	Glu	Lys	His	Arg	Gly	Phe	Leu	Ala	Gln

180								185				190					
Glu	Glu	Gln	Arg	Gln	Leu	Arg	Arg	Leu	Glu	Ala	Glu	Glu	Arg	Ala	Thr		
195								200				205					
Leu	Gln	Arg	Leu	Arg	Glu	Ser	Lys	Ser	Arg	Leu	Val	Gln	Gln	Ser	Lys		
210								215				220					
Ala	Leu	Lys	Glu	Leu	Ala	Asp	Glu	Leu	Gln	Glu	Arg	Cys	Gln	Arg	Pro		
225	230								235								240
Ala	Leu	Gly	Leu	Leu	Glu	Gly	Val	Arg	Gly	Val	Leu	Ser	Arg	Ser	Lys		
245								250				255					
Ala	Val	Thr	Arg	Leu	Glu	Ala	Glu	Asn	Ile	Pro	Met	Glu	Leu	Lys	Thr		
260								265				270					
Ala	Cys	Cys	Ile	Pro	Gly	Arg	Arg	Glu	Leu	Leu	Arg	Lys	Phe	Gln	Val		
275								280				285					
Asp	Val	Lys	Leu	Asp	Pro	Ala	Thr	Ala	His	Pro	Ser	Leu	Leu	Leu	Thr		
290								295				300					
Ala	Asp	Leu	Arg	Ser	Val	Gln	Asp	Gly	Glu	Pro	Trp	Arg	Asp	Val	Pro		
305	310								315								320
Asn	Asn	Pro	Glu	Arg	Phe	Asp	Thr	Trp	Pro	Cys	Ile	Leu	Gly	Leu	Gln		
325								330				335					
Ser	Phe	Ser	Ser	Gly	Arg	His	Tyr	Trp	Glu	Val	Leu	Val	Gly	Glu	Gly		
340								345				350					
Ala	Glu	Trp	Gly	Leu	Gly	Val	Cys	Gln	Asp	Thr	Leu	Pro	Arg	Lys	Gly		
355								360				365					
Glu	Thr	Met	Pro	Ser	Pro	Glu	Asn	Gly	Val	Trp	Ala	Leu	Trp	Leu	Leu		
370								375				380					
Lys	Gly	Asn	Glu	Tyr	Met	Val	Leu	Ala	Ser	Pro	Ser	Val	Pro	Leu	Leu		
385	390								395								400
Gln	Leu	Glu	Ser	Pro	Arg	Cys	Ile	Gly	Ile	Phe	Leu	Asp	Tyr	Glu	Ala		
405								410				415					
Gly	Glu	Ile	Ser	Phe	Tyr	Asn	Val	Thr	Asp	Gly	Ser	Tyr	Ile	Tyr	Thr		
420								425				430					
Phe	Asn	Gln	Leu	Phe	Ser	Gly	Leu	Leu	Arg	Pro	Tyr	Phe	Phe	Ile	Cys		
435								440				445					
Asp	Ala	Thr	Pro	Leu	Ile	Leu	Pro	Pro	Thr	Thr	Ile	Ala	Gly	Ser	Gly		
450								455				460					
Asn	Trp	Ala	Ser	Arg	Asp	His	Leu	Asp	Pro	Ala	Ser	Asp	Val	Arg	Asp		
465	470								475								480
Asp	His	Leu															

<210> 1065

<211> 892

<212> DNA

<213> Homo sapiens

<400> 1065

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 120
 ttgtccagtc tggaaggggg gaagaagaga tgaggggaag gctgtccagg ggggtgcaag
 180
 gccctagaga cccagcagag aagggaactct ggccactgaa ggggccctcc cattgtggct
 240

ctgggtccct agagcagctc cagcttcttg gcctcccccg tctgatgctt agctcatccc
 300
 atccccctgga gtgctgtgga gcttagatga aacagcccag tgctcactct tcaatgagcc
 360
 caccagagc agcatcaaga tgcagttggc ggggtactgg aactggcttg gcaagggctg
 420
 cgcaggcaac aggtcccagc aagagtcagc tagcctagct cagccctgca cacctggaga
 480
 cctgggggtg ctccagacac ctcgccctt taggtccctt taattgaatg tgtgtggatc
 540
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 600
 ttagtacctg ccagcttttc ctctcttaca taaatttcat gccagagcct ggaaatgtgt
 660
 gccctttgta ggaggggcat cacaggctgg ctcacctcag cagtgccagg cagagcccgt
 720
 ccctctcatt gcaggaggcg catgaagcgt gtctgggacc gagctgtgga gttcctggcc
 780
 tccaacgaat cccggatcca gacggagtcc caccgcgttg caggagagga catgctgggtg
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 892

<210> 1066

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1066

Met	Cys	Ala	Leu	Cys	Arg	Arg	Gly	Ile	Thr	Gly	Trp	Leu	Thr	Ser	Ala
1				5					10					15	
Val	Pro	Gly	Arg	Ala	Arg	Pro	Ser	His	Cys	Arg	Arg	Arg	Met	Lys	Arg
			20					25					30		
Val	Trp	Asp	Arg	Ala	Val	Glu	Phe	Leu	Ala	Ser	Asn	Glu	Ser	Arg	Ile
		35				40					45				
Gln	Thr	Glu	Ser	His	Arg	Val	Ala	Gly	Glu	Asp	Met	Leu	Val	Leu	Arg
	50					55					60				
Trp	Thr	Lys	Pro	Ser	Ser	Phe	Ser	Asp	Ser	Glu	Arg				
65					70					75					

<210> 1067

<211> 418

<212> DNA

<213> Homo sapiens

<400> 1067

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 120
 ggactagaca tctggaaagc ccgagtctcc gctgacatcg aaggcgactg gactatgcac
 180
 gttgaaggct ggtcagacac ctgggggcacg tggcatcaca atgccaatgc caagctcgcc
 240

gctgccatcg acgtcgaaact ggtgtgcgcc gaaggccatg ccctcataaa cgaggcggtc
 300
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 360
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 418

<210> 1068
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1068
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 20 25 30
 Asp Met His Gln Val Glu Pro Trp Gly Leu Asp Ile Trp Lys Ala Arg
 35 40 45
 Val Ser Ala Asp Ile Glu Gly Asp Trp Thr Met His Val Glu Gly Trp
 50 55 60
 Ser Asp Thr Trp Gly Thr Trp His His Asn Ala Asn Ala Lys Leu Ala
 65 70 75 80
 Ala Ala Ile Asp Val Glu Leu Val Cys Ala Glu Gly His Ala Leu Ile
 85 90 95
 Asn Glu Ala Val Arg His Ala Glu Gln Ser Gly Asp Thr Asp Ala Ile
 100 105 110
 Thr Ala Leu Arg Glu Thr Asp Ala Asn Leu Thr Leu Asp Arg Ala Pro
 115 120 125
 Asp Ser Leu Gln Gln Val Ile Asn Thr Tyr Ala
 130 135

<210> 1069
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 1069
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 120
 tttcttgagg ctgaacatct caggtgccat gtaaggcttg gtgccagcca tgggtggagac
 180
 ctgcgttatc acctgcaaca gaacgtccac ttcaaggaag aaacagtga gctcttcac
 240
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 360
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 371

<210> 1070

<211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1070
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 Asn Ser Lys Gly Ile Ala Cys Ser Phe Ser Gly Ala Glu His Leu Arg
 35 40 45
 Cys His Val Arg Leu Gly Ala Ser His Gly Gly Asp Leu Arg Tyr His
 50 55 60
 Leu Gln Gln Asn Val His Phe Lys Glu Glu Thr Val Lys Leu Phe Ile
 65 70 75 80
 Cys Glu Leu Val Met Ala Leu Asp Tyr Leu Gln Asn Gln Arg Ile Ile
 85 90 95
 His Arg Asp Met Lys Pro Asp Asn Ile Leu Leu Asp Glu His Gly His
 100 105 110
 Val His Ile Thr Asp Phe Asn Ile Ala Ala Met
 115 120

<210> 1071
 <211> 998
 <212> DNA
 <213> Homo sapiens

<400> 1071
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 120
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 300
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 360
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 420
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 480
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 540
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 600
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 660
 attcgccgct actccaagtg aagaatccag gtacatgtcc atgagtagca gcccataat
 720
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 780

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 840
 ctatctcact ggctcaatgg ctttacttgc cgacggggtt tcacaaggca accccatgca
 900
 ggcgcttttg gcatcgctgc agctgcctac ggttacgcaa aacgccacgc ttccagcagt
 960
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 998

<210> 1072

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1072

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Arg	Ile	Ala	Gly	Gln	Ile	Gln	Ala	Val	Glu	Arg	Ala	Leu	Glu	Ser	Asp
			20					25				30			
Ala	Asp	Cys	Ala	Lys	Thr	Leu	His	Leu	Val	Ala	Ala	Thr	Arg	Gly	Ala
		35					40					45			
Ile	Asn	Gly	Leu	Met	Asp	Glu	Ile	Ile	Glu	Asp	His	Ala	Arg	Lys	His
	50					55					60				
Val	Ala	Ser	Pro	Thr	Leu	Ser	Asp								
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<210> 1073

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1073

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 120
 ttccccact gataaaatct tgcttctctt caaactccta ggcaaatttc tcctacttca
 180
 gaaagtcttg tttctccata tccttcgtaa ccaccacctg gtgcacatgc tgaaggcaga
 240
 attcattgtc tcctctcctt cactctcgaa tagctttgcc cagaccctca ggtactcctt
 300
 catcctctgt ataatatctg gttttcacct ctttatgaac tcttttgtat tctcattact
 360
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 468

<210> 1074

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1074

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Met Asp Asn Phe Leu Phe Phe Lys Tyr Thr Leu Pro Met Ser Gln Leu
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Gly Cys Phe Ser Pro Thr Asp Lys Ile Leu Leu Leu Phe Lys Leu Leu
      20           25           30
Gly Lys Phe Leu Leu Leu Gln Lys Val Leu Phe Leu His Ile Leu Arg
      35           40           45
Asn His His Leu Val His Met Leu Lys Ala Glu Phe Ile Val Ser Ser
      50           55           60
Pro Ser Leu Ser Asn Ser Phe Ala Gln Thr Leu Arg Tyr Ser Phe Ile
      65           70           75           80
Leu Cys Ile Ile Phe Gly Phe His Leu Phe Met Asn Ser Phe Val Phe
      85           90           95
Ser Leu Leu Ala Leu Glu Pro Arg Thr Tyr His Gly Phe Lys Val Cys
      100           105           110
Phe Asn Glu Leu Asn Gly Ile Asn Phe Val Val Leu Met Gln Ile Gln
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Met Pro Leu Asn Thr Asp
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<210> 1075

<211> 1633

<212> DNA

<213> Homo sapiens

<400> 1075

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gcgcctgctg atcctgcccc aggaggagga ctatggcttt gacatcgagg agaagaacaa
180
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240
ggggaggaag atctactcca tcaatgagga cctgggtgtt ctgcggccgt ttctagaggt
300
ggagtccatc ctcaaccagt ccttctgctc ccgccgccct ctgcgcctcc tggtagccac
360
gaaggccaaa gagatcatca aaatccccga ccagccggac aactgtgct tccagattcg
420
tggagctgcc ccaccgtacg tctatgctgt ggggagaggg tctgaggcca tggctgcagg
480
gctctgtgct ggtcagtgca ttctgaaggt caatggcagc aacgtgatga acgatggtgc
540
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600
gtaccagtgg atctaccaca cccatgagga tgcccaggaa gcacgagcca gtcaggaggc
660
ctccactgag gacccagtg gcgagcaggc ccaggaggaa gaccaggctg attcagcctt
720
cccactgctg tccttgggtc cccggtgag cctgtgtgag ggcagcccca tggtcaccct
780
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840

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cgtcaggtgc catgtgctgg agaagatcgt ggagccccgc ggctgcttcg gcctcaccgc
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 960
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 1020
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 1080
 gaagagcagg gtcagcccac ccttcaaaca agccccctg gagccccacc cgctgtgtgg
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 cctacttctg cccaccaat tgccacatca acctcatgga agtgtcctac cccaagacca
 1200
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 1260
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 1320
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 1380
 tccatgatgg cagcttcggg ccagccagtg ggacccttgg tcaggaagac cggggcctca
 1440
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 1500
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 1620
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 1633

<210> 1076

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1076

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1				5				10						15	
Cys	Ser	Pro	Thr	Glu	Glu	Gln	Gly	Gln	Pro	Thr	Leu	Gln	Thr	Ser	Pro
			20					25					30		
Pro	Gly	Ala	Pro	Pro	Ala	Val	Trp	Pro	Thr	Ser	Ala	Pro	Pro	Ile	Ala
		35					40					45			
Thr	Ser	Thr	Ser	Trp	Lys	Cys	Pro	Thr	Pro	Arg	Pro	Pro	Pro	Gln	Trp
	50					55					60				
Ala	Gly	Pro	Ser	Ala	Ser	Ala	Leu	Asp	Ala	Asn	Pro	Pro	Ser	Ser	Ala
65					70					75					80
Leu	Thr	Arg	Ser	Lys	Ala	Thr									
				85											

<210> 1077

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1077

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 120
 caccagagt ttacatatcc aatttttgga gaggtgagg caatttacgg ctacaacggc
 180
 ttgcacatga atcttgctt tgcgagcggc agcctgggtc cgtcgctcga aatcacttac
 240
 cgcgctaaga atacgacgac gtccgctaaa gtagatgacg tggagcaggc tctgcgcgga
 300
 gtgctcccg cagatgtcgt tactcctgca gaacttgatg ctatcgttgc acgcgacgcc
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 419

<210> 1078

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1078

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1				5					10					15	
Trp	Thr	Cys	Asn	Ala	Asn	Glu	Ala	Thr	Cys	Leu	Arg	Leu	Ala	Gly	Ala
			20					25					30		
Pro	Ser	Pro	Ser	Asp	Ala	Leu	Phe	His	Pro	Glu	Phe	Thr	Tyr	Pro	Ile
		35					40					45			
Phe	Gly	Glu	Ala	Glu	Ala	Ile	Tyr	Gly	Tyr	Asn	Gly	Leu	His	Met	Asn
	50					55					60				
Leu	Ala	Phe	Ala	Ser	Gly	Ser	Leu	Val	Pro	Ser	Leu	Glu	Ile	Thr	Tyr
65					70					75				80	
Arg	Ala	Lys	Asn	Thr	Thr	Ser	Ala	Lys	Val	Asp	Asp	Val	Glu	Gln	
			85						90				95		
Ala	Leu	Arg	Gly	Val	Leu	Pro	Pro	Asp	Val	Val	Thr	Pro	Ala	Glu	Leu
		100						105					110		
Asp	Ala	Ile	Val	Ala	Arg	Asp	Ala	Arg	Ala	Val	Arg	Ala	His	Leu	Arg
		115					120					125			
Arg	Arg	Ala	Pro	Arg	Leu	Arg	Arg	Thr	Leu	Ala					
	130						135								

<210> 1079

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1079

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 120
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 180
 ttctatttag gtcttgtgac acaacagtgg gcaaggtgat gccctctgtg accaaaagta
 240

ttaccacca gttccccag gccctccctt tcgtctgcaa agacacacat ctgtttcact
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 360
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 420
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 480
 cacagcacct tgttcctttc tgtaatctag acacttctgc acaatagagg gcccacccct
 540
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 584

<210> 1080

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1080

Met	Leu	His	Val	Val	Ser	Ala	Ser	Gln	Pro	Trp	Glu	Met	Tyr	Pro	His
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Ala	Val	Ala	Ser	Thr	Ile	Gly	Leu	Leu	Phe	Leu	Leu	Cys	Ser	Asn	Cys
			20					25					30		
Phe	Pro	Ser	Gln	Gln	Gly	Gly	Glu	Pro	Cys	Cys	Leu	Leu	Thr	Trp	Val
		35					40					45			
Val	Leu	Phe	Arg	Ser	Cys	Asp	Thr	Thr	Val	Gly	Lys	Val	Met	Pro	Ser
		50				55					60				
Val	Thr	Lys	Ser	Ile	Tyr	Pro	Lys	Phe	Pro	Gln	Ala	Leu	Pro	Phe	Val
65				70					75					80	
Cys	Lys	Asp	Thr	His	Leu	Phe	His	Cys	Val	Phe	Cys	Lys	Asp	Thr	His
			85					90					95		
Leu	Phe	His	Trp	Gly	Phe	Leu	Gln	Arg	His	Pro	Phe	Val	Ser	Pro	Phe
		100					105					110			
Lys	Gly	Phe	Pro	Leu	His	Leu	Val	Tyr	Phe						
		115					120								

<210> 1081

<211> 3077

<212> DNA

<213> Homo sapiens

<400> 1081

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 120
 tatatccaca atgggaagaa atccagggcc ttaagcccc tatctctgt ggccatagag
 180
 cagacatctc ttaagatgat gcaggcagta ggaggtgcac ctgcacgtcc cactggagaa
 240
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 300
 aaaactcatc tcgacactgt gcttccaaaa ttgacctgtc ctcagtgcaa caaggaattc
 360

cccaaccaag aatccttgct gaagcatggt accattcact ttatgatcac ttcaacgtat
420
tacatctgtg agagttgtga caagcaattc acatcagtgg atgaccttca gaaacacctg
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600
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660
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720
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780
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900 agctgcagac tttgtgacc aacagccagg agtcccacaa cagtccagat 960
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1020
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1140
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1200
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1260
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1980
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 2760
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<210> 1082

<211> 757

<212> PRT

<213> Homo sapiens

<400> 1082

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			20					25					30		
Lys	Asn	Ile	Pro	Leu	Ala	Leu	Asn	Tyr	Ile	His	Asn	Gly	Lys	Lys	Ser
			35				40					45			
Arg	Ala	Leu	Ser	Pro	Leu	Ser	Pro	Val	Ala	Ile	Glu	Gln	Thr	Ser	Leu
			50			55					60				
Lys	Met	Met	Gln	Ala	Val	Gly	Gly	Ala	Pro	Ala	Arg	Pro	Thr	Gly	Glu
65					70				75					80	
Tyr	Ile	Cys	Asn	Gln	Cys	Gly	Ala	Lys	Tyr	Thr	Ser	Leu	Asp	Ser	Phe

																85																	90																	95
Gln	Thr	His	Leu	Lys	Thr	His	Leu	Asp	Thr	Val	Leu	Pro	Lys	Leu	Thr											100											105											110		
Cys	Pro	Gln	Cys	Asn	Lys	Glu	Phe	Pro	Asn	Gln	Glu	Ser	Leu	Leu	Lys											115											120											125		
His	Val	Thr	Ile	His	Phe	Met	Ile	Thr	Ser	Thr	Tyr	Tyr	Ile	Cys	Glu											130											135											140		
Ser	Cys	Asp	Lys	Gln	Phe	Thr	Ser	Val	Asp	Asp	Leu	Gln	Lys	His	Leu											145											150											155		
Leu	Asp	Met	His	Thr	Phe	Val	Phe	Phe	Arg	Cys	Thr	Leu	Cys	Gln	Glu											165											170											175		
Val	Phe	Asp	Ser	Lys	Val	Ser	Ile	Gln	Leu	His	Leu	Ala	Val	Lys	His											180											185											190		
Ser	Asn	Glu	Lys	Lys	Val	Tyr	Arg	Cys	Thr	Ser	Cys	Asn	Trp	Asp	Phe											195											200											205		
Arg	Asn	Glu	Thr	Asp	Leu	Gln	Leu	His	Val	Lys	His	Asn	His	Leu	Glu											210											215											220		
Asn	Gln	Gly	Lys	Val	His	Lys	Cys	Ile	Phe	Cys	Gly	Glu	Ser	Phe	Gly											225											230											235		
Thr	Glu	Val	Glu	Leu	Gln	Cys	His	Ile	Thr	Thr	His	Ser	Lys	Lys	Tyr											245											250											255		
Asn	Cys	Lys	Phe	Cys	Ser	Lys	Ala	Phe	His	Ala	Ile	Ile	Leu	Leu	Glu											260											265											270		
Lys	His	Leu	Arg	Glu	Lys	His	Cys	Val	Phe	Glu	Thr	Lys	Thr	Pro	Asn											275											280											285		
Cys	Gly	Thr	Asn	Gly	Ala	Ser	Glu	Gln	Val	Gln	Lys	Glu	Glu	Val	Glu											290											295											300		
Leu	Gln	Thr	Leu	Leu	Thr	Asn	Ser	Gln	Glu	Ser	His	Asn	Ser	His	Asp											305											310											315		
Gly	Ser	Glu	Glu	Asp	Val	Asp	Thr	Ser	Glu	Pro	Met	Tyr	Gly	Cys	Asp											325											330											335		
Ile	Cys	Gly	Ala	Ala	Tyr	Thr	Met	Glu	Thr	Leu	Leu	Gln	Asn	His	Gln											340											345											350		
Leu	Arg	Asp	His	Asn	Ile	Arg	Pro	Gly	Glu	Ser	Ala	Ile	Val	Lys	Lys											355											360											365		
Lys	Ala	Glu	Leu	Ile	Lys	Gly	Asn	Tyr	Lys	Cys	Ser	Val	Cys	Ser	Arg											370											375											380		
Thr	Phe	Phe	Ser	Glu	Asn	Gly	Leu	Arg	Glu	His	Met	Gln	Thr	His	Leu											385											390											395		
Gly	Pro	Val	Lys	His	Tyr	Met	Cys	Pro	Ile	Cys	Gly	Glu	Arg	Phe	Pro											405											410											415		
Ser	Leu	Leu	Thr	Leu	Thr	Glu	His	Lys	Val	Thr	His	Ser	Lys	Ser	Leu											420											425											430		
Asp	Thr	Gly	Asn	Cys	Arg	Ile	Cys	Lys	Met	Pro	Leu	Gln	Ser	Glu	Glu											435											440											445		
Glu	Phe	Leu	Glu	His	Cys	Gln	Met	His	Pro	Asp	Leu	Arg	Asn	Ser	Leu											450											455											460		
Thr	Gly	Phe	Arg	Cys	Val	Val	Cys	Met	Gln	Thr	Val	Thr	Ser	Thr	Leu											465											470											475		
Glu	Leu	Lys	Ile	His	Gly	Thr	Phe	His	Met	Gln	Lys	Thr	Gly	Asn	Gly											485											490											495		
Ser	Ala	Val	Gln	Thr	Thr	Gly	Arg	Gly	Gln	His	Val	Gln	Lys	Leu	Tyr											500											505											510		
Lys	Cys	Ala	Ser	Cys	Leu	Lys	Glu	Phe	Arg	Ser	Lys	Gln	Asp	Leu	Val											51																								


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      515              520              525
Lys Leu Asp Ile Asn Gly Leu Pro Tyr Gly Leu Cys Ala Gly Cys Val
  530              535              540
Asn Leu Ser Lys Ser Ala Ser Pro Gly Ile Asn Val Pro Pro Gly Thr
545              550              555              560
Asn Arg Pro Gly Leu Gly Gln Asn Glu Asn Leu Ser Ala Ile Gly Glu
      565              570              575
Arg Gln Gly Gly Thr Glu Thr Arg Cys Ser Ser Cys Asn Val Lys
      580              585              590
Phe Glu Ser Glu Ser Glu Leu Gln Asn His Ile Gln Thr Ile His Arg
      595              600              605
Glu Leu Val Pro Asp Ser Asn Ser Thr Gln Leu Lys Thr Pro Gln Val
  610              615              620
Ser Pro Met Pro Arg Ile Ser Pro Ser Gln Ser Asp Glu Lys Lys Thr
625              630              635              640
Tyr Gln Cys Ile Lys Cys Gln Met Val Phe Tyr Asn Glu Trp Asp Ile
      645              650              655
Gln Val His Val Ala Asn His Met Ile Asp Glu Gly Leu Asn His Glu
      660              665              670
Cys Lys Leu Cys Ser Gln Thr Phe Asp Ser Pro Ala Lys Leu Gln Cys
      675              680              685
His Leu Ile Glu His Ser Phe Glu Gly Met Gly Gly Thr Phe Lys Cys
      690              695              700
Pro Val Cys Phe Thr Val Phe Val Gln Ala Asn Lys Leu Gln Gln His
705              710              715              720
Ile Phe Ser Ala His Gly Gln Glu Asp Lys Ile Tyr Asp Cys Thr Gln
      725              730              735
Cys Pro Gln Lys Phe Phe Phe Gln Thr Glu Leu Gln Asn His Thr Met
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<210> 1083

<211> 516

<212> DNA

<213> Homo sapiens

<400> 1083

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420
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<210> 1084
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1084
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20 25 30
Arg Gln Gly Gly Tyr Thr Gly Leu Arg Lys Ala Leu Thr Met Pro Pro
35 40 45
Asp Asp Val Val Ser Leu Val Lys Asp Ala Asn Leu Arg Gly Arg Gly
50 55 60
Gly Ala Gly Phe Pro Thr Gly Met Lys Trp Ser Phe Val Pro Lys Asp
65 70 75 80
Asn Pro Asn Pro Thr Tyr Leu Val Val Asn Gly Asp Glu Ser Glu Pro
85 90 95
Gly Thr Cys Lys Asp Met Pro Leu Met Met Ala Ser Pro His Thr Leu
100 105 110
Val Glu Gly Val Ile Ile Ala Ser Tyr Ala Ile Lys Ala Lys Met Ala
115 120 125
Phe Ile Tyr Ile Arg Gly Glu Val Leu His Val Val Arg Arg
130 135 140

<210> 1085
<211> 374
<212> DNA
<213> Homo sapiens

<400> 1085
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180
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240
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<210> 1086
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1086

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          20           25           30
Phe Phe Tyr Arg Asp Ile Tyr Lys Ser Asp Tyr Ser Phe Asp Leu His
          35           40           45
Gln Asp Tyr Glu Arg Ser Lys Glu Asn Phe Leu Lys Met Ile Gly Asp
          50           55           60
Ser Leu Leu Ala Glu Leu Asn Leu Val Asp Ile Asp Thr Val Arg Lys
65           70           75           80
Ile Ala Asn Ser Pro Leu Gly Ser Ser Glu Thr Leu Tyr Asp Phe Glu
          85           90           95
Arg Met Thr His Met Glu Val Trp Leu Arg Glu Asn Tyr Val
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<210> 1087

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1087

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120
nggcaccact gtgcctggcc catccaccgg agtctagggg tgcaatccac cgcccgtgca
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tcgtttctact tctacaacac tttcccggaa gtggatgcgt tagcgtcggc ggtgcgggcc
240
gcccggaat ttttcggagt gcattaggat tggctgaac gtgaaccttg aatccatgta
300
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<210> 1088

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1088

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Met Thr Ile Val Ala Pro Pro Pro Pro Thr Ala Gly Ala Ala Ile Ser
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Phe Leu Val Asp Gly Ile His Pro His Asp Leu Gly Gln Val Leu Asp
          20           25           30
Asp His Gly Val Ser Ile Arg Val Xaa His His Cys Ala Trp Pro Ile
          35           40           45
His Arg Ser Leu Gly Val Gln Ser Thr Ala Arg Ala Ser Phe Tyr Phe
          50           55           60
Tyr Asn Thr Phe Pro Glu Val Asp Ala Leu Ala Ser Ala Val Arg Ala

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Ala Arg Glu Phe Phe Gly Val His
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75

80

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<212> DNA
<213> Homo sapiens
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420
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480
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540
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600
aacacagaag ggcattgtgc gagacacacg tgatcacgct agtgatgcag aggcagacct
660
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<211> 103
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<213> Homo sapiens
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			20					25					30		
Arg	Val	Val	Arg	Met	Gly	Leu	Gly	Glu	Glu	Ala	Leu	Pro	Leu	Phe	Phe
			35				40					45			
Phe	Asn	Leu	Ala	Lys	Gly	Leu	Leu	Gly	Gln	Gly	His	Pro	Ser	Leu	Leu
	50					55					60				
Leu	Gly	Ala	Ser	Ile	Phe	Leu	His	Ser	Val	Lys	Asn	Gly	Gly	Val	Ile
65					70					75					80
Gln	Lys	Tyr	Pro	Pro	Tyr	Cys	Gln	Gly	Phe	Gly	Glu	Gly	Ser	Lys	Lys

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Lys Leu Ala Trp Glu Asn Thr
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90

95

<210> 1091
<211> 438
<212> DNA
<213> Homo sapiens

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<210> 1092
<211> 146
<212> PRT
<213> Homo sapiens

<400> 1092
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Tyr Ser Lys Ser Ala Ile Ile Thr Ala Tyr Met Asn Glu Val Tyr Leu
20 25 30
Ala Gln Val Gly Asn Glu Gly Leu His Gly Phe Ala Glu Ala Ser Gln
35 40 45
His Phe Phe Gly Arg Pro Leu Lys Glu Leu Asn Ile Asp Glu Phe Ala
50 55 60
Leu Leu Val Gly Met Val Lys Gly Pro Ser Ile Tyr Asn Pro Glu Arg
65 70 75 80
His Pro Lys Arg Ala Leu Ser Arg Arg Asn Thr Val Leu Ala Ile Leu
85 90 95
Lys Ser Gln Asp Arg Leu Thr Glu Ser Asp Tyr Asn Ile Leu Arg Lys
100 105 110
Gln Pro Ile Arg Leu Ala Asp Lys His Gln Glu Arg Ser Val Tyr Gly
115 120 125
Asp Tyr Leu Asp Leu Val Ser Met Gln Leu Ser Arg Asp Phe Asp Arg
130 135 140
Cys Met
145

<210> 1093
 <211> 351
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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<210> 1094
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1094
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 20 25 30
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 35 40 45
 Val Arg Glu Leu Leu His Ala Ile Asp Leu Glu His Glu Ile Gly Arg
 50 55 60
 Leu Arg Glu Gln Ile Pro Gln Thr Asn Ser Glu Thr Lys Ile Lys Lys
 65 70 75 80
 Leu Ser Lys Arg Leu Lys Leu Met Glu Ala Phe Gln Gly Ser Gly Asn
 85 90 95
 Leu Pro Glu Trp Met Val Leu Thr Val Leu Pro Val Leu Pro Pro Asp
 100 105 110
 Leu Arg Pro Leu Val
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<210> 1095
 <211> 619
 <212> DNA
 <213> Homo sapiens

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420
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<210> 1096

<211> 195

<212> PRT

<213> Homo sapiens

<400> 1096

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			20					25					30		
Gln	Leu	Arg	Gln	Gly	Ser	Ala	Gln	Ser	Gln	Arg	Gln	Ile	Arg	Gly	Glu
			35				40					45			
Ile	Asp	Ser	Leu	Arg	Gln	Glu	Lys	Asp	Ser	Leu	Leu	Lys	Gln	Arg	Leu
	50					55				60					
Glu	Ile	Asp	Gly	Lys	Leu	Arg	Gln	Gly	Ser	Leu	Ser	Pro	Glu	Glu	
65					70					75				80	
Glu	Arg	Thr	Leu	Phe	Gln	Leu	Asp	Glu	Ala	Ile	Glu	Ala	Leu	Asp	Ala
				85					90					95	
Ala	Ile	Glu	Tyr	Lys	Asn	Glu	Ala	Ile	Thr	Cys	Arg	Gln	Arg	Val	Leu
			100				105					110			
Arg	Ala	Ser	Ala	Ser	Leu	Leu	Ser	Gln	Cys	Glu	Met	Asn	Leu	Met	Ala
			115				120					125			
Lys	Leu	Ser	Tyr	Leu	Ser	Ser	Ser	Glu	Thr	Arg	Ala	Leu	Leu	Cys	Lys
			130				135					140			
Tyr	Phe	Asp	Lys	Val	Gly	Gln	Gln	Pro	Met	Ala	Pro	Pro	Ala	Pro	Pro
145					150					155				160	
His	Gly	Thr	Cys	Gly	Glu	Val	Ser	His	Gly	Ser	Cys	Ser	Ser	Gly	Tyr
				165					170					175	
Pro	Val	Ser	Ser	Gln	Thr	Gly	Gly	Gln	Asn	Gln	Asp	Gln	Leu	Ile	Cys
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Arg	Ala	Ala													
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<210> 1097

<211> 5108

<212> DNA

<213> Homo sapiens

<400> 1097

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 aaaaaaaaa
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<210> 1098

<211> 1336

<212> PRT

<213> Homo sapiens

<400> 1098

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			20					25				30			
Ser	Ser	Glu	Glu	Ala	Arg	Lys	Leu	Met	Val	Arg	Leu	Thr	Arg	His	Thr
		35					40				45				
Gly	Arg	Lys	Gln	Pro	Pro	Val	Ser	Glu	Ser	His	Trp	Arg	Thr	Leu	Leu
	50					55				60					
Gln	Asp	Met	Leu	Thr	Met	Gln	Gln	Asn	Val	Tyr	Thr	Cys	Leu	Asp	Ser
65					70				75					80	
Asp	Ala	Cys	Tyr	Glu	Ile	Phe	Thr	Glu	Ser	Leu	Leu	Cys	Ser	Ser	Arg
			85					90				95			
Leu	Glu	Asn	Ile	His	Leu	Ala	Gly	Gln	Met	Met	His	Cys	Ser	Ala	Cys
		100					105					110			
Ser	Glu	Asn	Pro	Pro	Ala	Gly	Ile	Ala	His	Lys	Gly	Lys	Pro	His	Tyr
	115					120					125				
Arg	Val	Ser	Tyr	Glu	Lys	Ser	Ile	Asp	Leu	Val	Leu	Ala	Ala	Ser	Arg
	130				135				140						
Glu	Tyr	Phe	Asn	Ser	Ser	Thr	Asn	Leu	Thr	Asp	Ser	Cys	Met	Asp	Leu
145				150					155					160	
Ala	Arg	Cys	Cys	Leu	Gln	Leu	Ile	Thr	Asp	Arg	Pro	Pro	Ala	Ile	Gln
			165					170					175		
Glu	Glu	Leu	Asp	Leu	Ile	Gln	Ala	Val	Gly	Cys	Leu	Glu	Glu	Phe	Gly
		180					185					190			
Val	Lys	Ile	Leu	Pro	Leu	Gln	Val	Arg	Leu	Cys	Pro	Asp	Arg	Ile	Ser
	195					200					205				
Leu	Ile	Lys	Glu	Cys	Ile	Ser	Gln	Ser	Pro	Thr	Cys	Tyr	Lys	Gln	Ser
	210					215					220				
Thr	Lys	Leu	Leu	Gly	Leu	Ala	Glu	Leu	Leu	Arg	Val	Ala	Gly	Glu	Asn
225				230					235					240	
Pro	Glu	Glu	Arg	Arg	Gly	Gln	Val	Leu	Ile	Leu	Leu	Val	Glu	Gln	Ala
			245					250					255		
Leu	Arg	Phe	His	Asp	Tyr	Lys	Ala	Ala	Ser	Met	His	Cys	Gln	Glu	Leu
		260					265					270			
Met	Ala	Thr	Gly	Tyr	Pro	Lys	Ser	Trp	Asp	Val	Cys	Ser	Gln	Leu	Gly

275					280					285						
Gln	Ser	Glu	Gly	Tyr	Gln	Asp	Leu	Ala	Thr	Arg	Gln	Glu	Leu	Met	Ala	
290					295					300						
Phe	Ala	Leu	Thr	His	Cys	Pro	Pro	Ser	Ser	Ile	Glu	Leu	Leu	Leu	Ala	
305					310					315					320	
Ala	Ser	Ser	Ser	Leu	Gln	Thr	Glu	Ile	Leu	Tyr	Gln	Arg	Val	Asn	Phe	
325					330					335						
Gln	Ile	His	His	Glu	Gly	Gly	Glu	Asn	Ile	Ser	Ala	Ser	Pro	Leu	Thr	
340					345					350						
Ser	Lys	Ala	Val	Gln	Glu	Asp	Glu	Val	Gly	Val	Pro	Gly	Ser	Asn	Ser	
355					360					365						
Ala	Asp	Leu	Leu	Arg	Trp	Thr	Thr	Ala	Thr	Thr	Met	Lys	Val	Leu	Ser	
370					375					380						
Asn	Thr	Thr	Thr	Thr	Thr	Lys	Ala	Val	Leu	Gln	Ala	Val	Ser	Asp	Gly	
385					390					395					400	
Gln	Trp	Trp	Lys	Lys	Ser	Leu	Thr	Tyr	Leu	Arg	Pro	Leu	Gln	Gly	Gln	
405					410					415						
Lys	Cys	Gly	Gly	Ala	Tyr	Gln	Ile	Gly	Thr	Thr	Ala	Asn	Glu	Asp	Leu	
420					425					430						
Glu	Lys	Gln	Gly	Cys	His	Pro	Phe	Tyr	Glu	Ser	Val	Ile	Ser	Asn	Pro	
435					440					445						
Phe	Val	Ala	Glu	Ser	Glu	Gly	Thr	Tyr	Asp	Thr	Tyr	Gln	His	Val	Pro	
450					455					460						
Val	Glu	Ser	Phe	Ala	Glu	Val	Leu	Leu	Arg	Thr	Gly	Lys	Leu	Ala	Glu	
465					470					475					480	
Ala	Lys	Asn	Lys	Gly	Glu	Val	Phe	Pro	Thr	Thr	Glu	Val	Leu	Leu	Gln	
485					490					495						
Leu	Ala	Ser	Glu	Ala	Leu	Pro	Asn	Asp	Met	Thr	Leu	Ala	Leu	Ala	Tyr	
500					505					510						
Leu	Leu	Ala	Leu	Pro	Gln	Val	Leu	Asp	Ala	Asn	Arg	Cys	Phe	Glu	Lys	
515					520					525						
Gln	Ser	Pro	Ser	Ala	Leu	Ser	Leu	Gln	Leu	Ala	Ala	Tyr	Tyr	Tyr	Ser	
530					535					540						
Leu	Gln	Ile	Tyr	Ala	Arg	Leu	Ala	Pro	Cys	Phe	Arg	Asp	Lys	Cys	His	
545					550					555					560	
Pro	Leu	Tyr	Arg	Ala	Asp	Pro	Lys	Glu	Leu	Ile	Lys	Met	Val	Thr	Arg	
565					570					575						
His	Val	Thr	Arg	His	Glu	His	Glu	Ala	Trp	Pro	Glu	Asp	Leu	Ile	Ser	
580					585					590						
Leu	Thr	Lys	Gln	Leu	His	Cys	Tyr	Asn	Glu	Arg	Leu	Leu	Asp	Phe	Thr	
595					600					605						
Gln	Ala	Gln	Ile	Leu	Gln	Gly	Leu	Arg	Lys	Gly	Val	Asp	Val	Gln	Arg	
610					615					620						
Phe	Thr	Ala	Asp	Asp	Gln	Tyr	Lys	Arg	Glu	Thr	Ile	Leu	Gly	Leu	Ala	
625					630					635					640	
Glu	Thr	Leu	Glu	Glu	Ser	Val	Tyr	Ser	Ile	Ala	Ile	Ser	Leu	Ala	Gln	
645					650					655						
Arg	Tyr	Ser	Val	Ser	Arg	Trp	Glu	Val	Phe	Met	Thr	His	Leu	Glu	Phe	
660					665					670						
Pro	Phe	Thr	Asp	Ser	Gly	Leu	Ser	Thr	Leu	Glu	Ile	Glu	Asn	Arg	Ala	
675					680					685						
Gln	Asp	Leu	His	Leu	Phe	Glu	Thr	Leu	Lys	Thr	Asp	Pro	Glu	Ala	Phe	
690					695					700						
His	Gln	His	Met	Val	Lys	Tyr	Ile	Tyr	Pro	Thr	Ile	Gly	Gly	Phe	Asp	

705					710					715				720
His	Glu	Arg	Leu	Gln	Tyr	Tyr	Phe	Thr	Leu	Leu	Glu	Asn	Cys	Gly Cys
				725					730					735
Ala	Asp	Leu	Gly	Asn	Cys	Ala	Ile	Lys	Pro	Glu	Thr	His	Ile	Arg Leu
			740					745					750	
Leu	Lys	Lys	Phe	Lys	Val	Val	Ala	Ser	Gly	Leu	Asn	Tyr	Lys	Lys Leu
			755				760					765		
Thr	Asp	Glu	Asn	Met	Ser	Pro	Leu	Glu	Ala	Leu	Glu	Pro	Val	Leu Ser
			770			775						780		
Ser	Gln	Asn	Ile	Leu	Ser	Ile	Ser	Lys	Leu	Val	Pro	Lys	Ile	Pro Glu
785					790					795				800
Lys	Asp	Gly	Gln	Met	Leu	Ser	Pro	Ser	Ser	Leu	Tyr	Thr	Ile	Trp Leu
				805					810					815
Gln	Lys	Leu	Phe	Trp	Thr	Gly	Asp	Pro	His	Leu	Ile	Lys	Gln	Val Pro
			820					825					830	
Gly	Ser	Ser	Pro	Glu	Trp	Leu	His	Ala	Tyr	Asp	Val	Cys	Met	Lys Tyr
			835				840					845		
Phe	Asp	Arg	Leu	His	Pro	Gly	Asp	Leu	Ile	Thr	Val	Val	Asp	Ala Val
			850			855					860			
Thr	Phe	Ser	Pro	Lys	Ala	Val	Thr	Lys	Leu	Ser	Val	Glu	Ala	Arg Lys
865					870					875				880
Glu	Met	Thr	Arg	Lys	Ala	Ile	Lys	Thr	Val	Lys	His	Phe	Ile	Glu Lys
				885					890					895
Pro	Arg	Lys	Arg	Asn	Ser	Glu	Asp	Glu	Ala	Gln	Glu	Ala	Lys	Asp Ser
			900					905					910	
Lys	Val	Thr	Tyr	Ala	Asp	Thr	Leu	Asn	His	Leu	Glu	Lys	Ser	Leu Ala
			915				920					925		
His	Leu	Glu	Thr	Leu	Ser	His	Ser	Phe	Ile	Leu	Ser	Leu	Lys	Asn Ser
			930			935					940			
Glu	Gln	Glu	Thr	Leu	Gln	Lys	Tyr	Ser	His	Leu	Tyr	Asp	Leu	Ser Arg
945					950					955				960
Ser	Glu	Lys	Glu	Lys	Leu	His	Asp	Glu	Ala	Val	Ala	Ile	Cys	Leu Asp
				965					970					975
Gly	Gln	Pro	Leu	Ala	Met	Ile	Gln	Gln	Leu	Leu	Glu	Val	Ala	Val Gly
			980					985					990	
Pro	Leu	Asp	Ile	Ser	Pro	Lys	Asp	Ile	Val	Gln	Ser	Ala	Ile	Met Lys
			995			1000						1005		
Ile	Ile	Ser	Ala	Leu	Ser	Gly	Gly	Ser	Ala	Asp	Leu	Gly	Gly	Pro Arg
			1010			1015					1020			
Asp	Pro	Leu	Lys	Val	Leu	Glu	Gly	Val	Val	Ala	Ala	Val	His	Thr Ser
1025					1030					1035				1040
Val	Asp	Lys	Gly	Glu	Leu	Val	Ser	Pro	Glu	Asp	Leu	Leu	Glu	Trp
				1045				1050						1055
Leu	Arg	Pro	Phe	Cys	Ala	Asp	Asp	Ala	Trp	Pro	Val	Arg	Pro	Arg Ile
			1060					1065					1070	
His	Val	Leu	Gln	Ile	Leu	Gly	Gln	Ser	Phe	His	Leu	Thr	Glu	Glu Asp
			1075				1080					1085		
Ser	Lys	Leu	Leu	Val	Phe	Phe	Arg	Thr	Glu	Ala	Ile	Leu	Lys	Ala Ser
			1090			1095					1100			
Trp	Pro	Gln	Arg	Gln	Val	Asp	Ile	Ala	Asp	Ile	Glu	Asn	Glu	Glu Asn
1105					1110					1115				1120
Arg	Tyr	Cys	Leu	Phe	Met	Glu	Leu	Leu	Glu	Ser	Ser	His	His	Glu Ala
				1125				1130						1135
Glu	Phe	Gln	His	Leu	Val	Leu	Leu	Leu	Gln	Ala	Trp	Pro	Pro	Met Lys

1140	1145	1150
Ser Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg Leu Ala Thr Val		
1155	1160	1165
Met Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly Asn Glu		
1170	1175	1180
Val Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro		
1185	1190	1195
Ala Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Asn Gln Ser Leu		1200
1205	1210	1215
Leu Leu Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu		
1220	1225	1230
His Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp		
1235	1240	1245
Ser Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu		
1250	1255	1260
Leu Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His		
1265	1270	1275
Leu Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly		1280
1285	1290	1295
Arg His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu		
1300	1305	1310
Leu Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala		
1315	1320	1325
Leu Arg Ala Ala Gln His Trp Val		
1330	1335	

<210> 1099

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1099

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acgcgtgctc tctcccgtt ggcaatcagc atggcctttt cgagctcggc ggtgcgcaat
60
tgaaccattt cttccagttg cgatttttca gaaagcagcg tcgattgacc ttcggtcagc
120
ttgcgcacat agcgccttggg gcggctggca aggatatagg cgagtatcaa tgcacctgcg
180
agggcgagga tcgaggcaat ggtagccag aagcgcaact tgtccatggc tatgttgcg
240
gcgattagcc gacgatcttc ttcaccagg aaactgttga tggttttcct gacgtcatcc
300
atctggcca
309

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<210> 1100

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1100

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Met Asp Asp Val Arg Lys Thr Ile Asn Ser Phe Leu Gly Glu Glu Asp
1      5      10     15
Arg Arg Leu Ile Ala Arg Asn Ile Ala Met Asp Lys Leu Arg Phe Trp

```



```

      20      25      30
Leu Thr Ile Ala Ser Ile Leu Ala Leu Ala Gly Ala Leu Ile Leu Ala
      35      40      45
Tyr Ile Leu Ala Ser Arg Thr Lys Arg Tyr Val Arg Lys Leu Thr Glu
      50      55      60
Gly Gln Ser Thr Leu Leu Ser Glu Lys Ser Gln Leu Glu Glu Met Val
65      70      75      80
Gln Leu Arg Thr Ala Glu Leu Glu Lys Ala Met Leu Ile Ala Lys Arg
      85      90      95
Glu Arg Ala Arg
      100

```

<210> 1101

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1101

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gtcgacgtta ccaactacgt catgttggag tctggtcagc cgcttcatgc ctatgatgcc
60
gacaacgtca gcgggacgat tgtggtccgt aagggccacg aggggtgagca tctattgacc
120
ctcgacgaca ccgatcgac cctcgatcct gacgatctag tcatcgccga cgactcggga
180
gccattggcc tggctggcgt catgggtggt gcggccaccg aagtgactgc tgagacgacg
240
tcaatcatcc tcgagggcgc tcacttcgac ccgatgacgg gcgctcgtgc ttaccgacgc
300
cacaagctcg gttcggaggc ctcccgcgc tttgagcggg gcgttgatcc gatttgccgc
360
cataccgcag ccgttcgcgc agcggaattg ctgcgccagt acggcggtgc caccgtcggc
420
gagcccaccg tcgttggtga ggtccccgag atgccacgtc aaacgatcaa cgctgattta
480
cctaaccgga ttctcggcac gaaggtgcc actgaagagg tcatcgagat cttgacgcgt
540

```

<210> 1102

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1102

```

Val Asp Val Thr Asn Tyr Val Met Leu Glu Ser Gly Gln Pro Leu His
1      5      10      15
Ala Tyr Asp Ala Asp Asn Val Ser Gly Thr Ile Val Val Arg Lys Ala
      20      25      30
His Glu Gly Glu His Leu Leu Thr Leu Asp Asp Thr Asp Arg Thr Leu
      35      40      45
Asp Pro Asp Asp Leu Val Ile Ala Asp Asp Ser Gly Ala Ile Gly Leu
      50      55      60
Ala Gly Val Met Gly Gly Ala Ala Thr Glu Val Thr Ala Glu Thr Thr
65      70      75      80
Ser Ile Ile Leu Glu Gly Ala His Phe Asp Pro Met Thr Gly Ala Arg

```


								85				90				95			
Ala	Tyr	Arg	Arg	His	Lys	Leu	Gly	Ser	Glu	Ala	Ser	Arg	Arg	Phe	Glu				
								100				105				110			
Arg	Gly	Val	Asp	Pro	Ile	Cys	Ala	His	Thr	Ala	Ala	Val	Arg	Ala	Ala				
								115				120				125			
Glu	Leu	Leu	Ala	Gln	Tyr	Gly	Gly	Ala	Thr	Val	Gly	Glu	Pro	Thr	Val				
								130				135				140			
Val	Gly	Glu	Val	Pro	Glu	Met	Pro	Arg	Gln	Thr	Ile	Asn	Ala	Asp	Leu				
								145				150				155			
Pro	Asn	Arg	Ile	Leu	Gly	Thr	Lys	Val	Pro	Thr	Glu	Glu	Val	Ile	Glu				
								165				170				175			
Ile	Leu	Thr	Arg																
								180											

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<210> 1103
<211> 537
<212> DNA
<213> Homo sapiens
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<400> 1103
cctttcctcc aaccaggcgc tgcggcgccg gcacttgccc gacgttataa aacaattcaa
60
cgtcaggttt accatcgctg tactcaacca aatggtagcc gtatccacct tccccaccga
120
tcgcgaccca ggtgatcttt ccctcggcat agattgacgt ggcattctcg tcggagtga
180
tcaagcagcg cttaggcagc tgctgggccc gcggcttcgc ctagctcgcc ggagcacacg
240
aacccttccc gaagataacc gccaaaggcct ggcacacctt ctgctgcacc cattccggct
300
tgacgccgac cgccaccgca ctggtgaaca tagccgcaat aaggagaatt gcgatgtatt
360
ccggcgcggc ggcaccccga tcgtcccttg tccgcatggg tctccctcc actacctacc
420
caatacaggg gagagcataa aaagaaacc atagccgcac ctgagcccat ggccccaaac
480
cgggggcccc gccgggcccc aaccatggga tcaaccggat gtccgtacat cacgcgt
537
```

```
<210> 1104
<211> 112
<212> PRT
<213> Homo sapiens
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<400> 1104
Met Tyr Gly His Pro Val Asp Pro Met Val Trp Ala Arg Leu Gly Pro
 1                    5                10              15
Arg Phe Gly Ala Met Gly Ser Gly Ala Ala Met Gly Phe Phe Leu Cys
      20                25              30
Ser Pro Leu Tyr Trp Val Gly Ser Gly Gly Glu Thr His Ala Asp Lys
      35                40              45
Gly Arg Ser Gly Cys Arg Arg Ala Gly Ile His Arg Asn Ser Pro Tyr
      50                55              60
Cys Gly Tyr Val His Gln Cys Gly Gly Gly Arg Arg Gln Ala Gly Met

```


65		70		75		80									
Gly	Ala	Ala	Glu	Gly	Val	Pro	Gly	Leu	Gly	Gly	Tyr	Leu	Arg	Glu	Gly
			85					90						95	
Phe	Val	Cys	Ser	Gly	Glu	Leu	Gly	Glu	Ala	Ala	Gly	Pro	Ala	Ala	Ala
			100					105					110		

<210> 1105

<211> 448

<212> DNA

<213> Homo sapiens

<400> 1105

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agggacctgg ggcagcacgt gcacgtgggt gggaggctcc ttgctaccga cagccagcca
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tggggtgggc ccttcagagg ctgcctccag gacctgcgac tcgatggctg ccacctcccc
120
ttctttcctc tgccactgga taactcaagc cagcccagcg agctcggcgg caggcagtcc
180
tggaacctca ctgcgggctg cgtctccgag gacatgtgca gtctgaccc ctgtttcaat
240
ggtgggactt gcctcgtcac ctggaatgac ttccactgta cctgccctgc caatttcacg
300
gggcctacat gtgccagca gctgtggtgt cccggccagc cctgtctccc acctgccacg
360
tgtgaggagg tccctgatgg ctttgtgtgt gtggcggagg ccacgttccg cgagggtccc
420
ccgcgcgct tcagcgggca caacgcgt
448

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<210> 1106

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1106

Arg	Asp	Leu	Gly	Gln	His	Val	His	Val	Gly	Gly	Arg	Leu	Leu	Ala	Thr
1				5					10					15	
Asp	Ser	Gln	Pro	Trp	Gly	Gly	Pro	Phe	Arg	Gly	Cys	Leu	Gln	Asp	Leu
			20					25					30		
Arg	Leu	Asp	Gly	Cys	His	Leu	Pro	Phe	Phe	Pro	Leu	Pro	Leu	Asp	Asn
			35				40						45		
Ser	Ser	Gln	Pro	Ser	Glu	Leu	Gly	Gly	Arg	Gln	Ser	Trp	Asn	Leu	Thr
			50				55				60				
Ala	Gly	Cys	Val	Ser	Glu	Asp	Met	Cys	Ser	Pro	Asp	Pro	Cys	Phe	Asn
65					70					75				80	
Gly	Gly	Thr	Cys	Leu	Val	Thr	Trp	Asn	Asp	Phe	His	Cys	Thr	Cys	Pro
			85					90					95		
Ala	Asn	Phe	Thr	Gly	Pro	Thr	Cys	Ala	Gln	Gln	Leu	Trp	Cys	Pro	Gly
			100					105					110		
Gln	Pro	Cys	Leu	Pro	Pro	Ala	Thr	Cys	Glu	Glu	Val	Pro	Asp	Gly	Phe
			115				120						125		
Val	Cys	Val	Ala	Glu	Ala	Thr	Phe	Arg	Glu	Gly	Pro	Pro	Ala	Ala	Phe
			130				135					140			
Ser	Gly	His	Asn	Ala											

145

<210> 1107

<211> 618

<212> DNA

<213> Homo sapiens

<400> 1107

acgcgttgat gaagtacctg ccacgcttca gcaatgacgg ctcggtgaac ggcttctata
 60
 tctttgttat cgatgagacc gaacgcaaac tcaccgaaga ggccctgcgc cacctcaacg
 120
 agaacctcga agagcgcgtc gccagcgcga cacaggcgcgt ggctgaagcc aaccaacgcc
 180
 tggcaaaaca aaatgttcaa acgcaagcgc gccgaagacg cgctgcgtca cgcgcagaaa
 240
 atggaagccg ggggccagct caccggcggc atcgcccatg atttcaacaa catgctgacc
 300
 gggattatcg gcagcctgga cttgatgcag cgctacatcn aggcggggcg cagcgacgaa
 360
 atcgggcgcnc ttactgacgc cgccgtatcg tccgcccacg gcgcggccgc cctcaccat
 420
 cggtctgtgg cgttctcgcg ccgccagtcg ctggccccc gcccgtgga cccaaccag
 480
 ctggtagcgt ccctggagga tctgttccag cgaaccaaag gcgcgcatat cacgctcaaa
 540
 gtgcaactgg gccgcgatat ctggcccgtg aataccgatg ccagccagtt ggaaaacgcc
 600
 ctgctcaacc tggcgatc
 618

<210> 1108

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1108

Met	Arg	Pro	Asn	Ala	Asn	Ser	Pro	Lys	Arg	Pro	Cys	Ala	Thr	Ser	Thr
1				5					10					15	
Arg	Thr	Ser	Lys	Ser	Ala	Ser	Pro	Ser	Ala	His	Arg	Arg	Trp	Leu	Lys
			20						25				30		
Pro	Thr	Asn	Ala	Trp	Gln	Asn	Lys	Met	Phe	Lys	Arg	Lys	Arg	Ala	Glu
			35					40				45			
Asp	Ala	Leu	Arg	His	Ala	Gln	Lys	Met	Glu	Ala	Gly	Gly	Gln	Leu	Thr
			50				55				60				
Gly	Gly	Ile	Ala	His	Asp	Phe	Asn	Asn	Met	Leu	Thr	Gly	Ile	Ile	Gly
65					70				75					80	
Ser	Leu	Asp	Leu	Met	Gln	Arg	Tyr	Ile	Xaa	Ala	Gly	Arg	Ser	Asp	Glu
				85				90					95		
Ile	Gly	Arg	Leu	Thr	Asp	Ala	Ala	Val	Ser	Ser	Ala	His	Arg	Ala	Ala
			100					105				110			
Ala	Leu	Thr	His	Arg	Leu	Leu	Ala	Phe	Ser	Arg	Arg	Gln	Ser	Leu	Ala
			115				120					125			
Pro	Arg	Pro	Leu	Asp	Pro	Asn	Gln	Leu	Val	Ala	Ser	Leu	Glu	Asp	Leu

130		135		140											
Phe	Gln	Arg	Thr	Lys	Gly	Ala	His	Ile	Thr	Leu	Lys	Val	Gln	Leu	Gly
145				150						155					160
Arg	Asp	Ile	Trp	Pro	Val	Asn	Thr	Asp	Ala	Ser	Gln	Leu	Glu	Asn	Ala
			165						170					175	
Leu	Leu	Asn	Leu	Ala	Ile										
		180													

<210> 1109

<211> 325

<212> DNA

<213> Homo sapiens

<400> 1109

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accggtgagc atcagggagg caccatgcag acgactctcc catccagtct caagccgtcc
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agcctcaaga tcgtcgcc gctggggggc atcctcgtgc ccctggatca ggtgcccgat
120
cccgttttcg cccagaagat ggtgggagac gggatctccc tggaccccat ctcaaacgaa
180
ttgctggcgc cggtcgccgg caccgtgacc cagctccaca acgcccacca cgcgctcacg
240
atcacgaccc cggaaggcat cgaggttctg gtccatatcg gactggatac cgtgatgctg
300
cgcggcgaca gctatccccc ccccn
325

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<210> 1110

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1110

Thr	Gly	Glu	His	Gln	Gly	Gly	Thr	Met	Gln	Thr	Thr	Leu	Pro	Ser	Ser
1				5					10					15	
Leu	Lys	Pro	Ser	Ser	Leu	Lys	Ile	Val	Ala	Pro	Leu	Gly	Gly	Ile	Leu
			20					25					30		
Val	Pro	Leu	Asp	Gln	Val	Pro	Asp	Pro	Val	Phe	Ala	Gln	Lys	Met	Val
		35					40				45				
Gly	Asp	Gly	Ile	Ser	Leu	Asp	Pro	Ile	Ser	Asn	Glu	Leu	Leu	Ala	Pro
	50					55				60					
Val	Ala	Gly	Thr	Val	Thr	Gln	Leu	His	Asn	Ala	His	His	Ala	Leu	Thr
65					70				75					80	
Ile	Thr	Thr	Pro	Glu	Gly	Ile	Glu	Val	Leu	Val	His	Ile	Gly	Leu	Asp
			85					90					95		
Thr	Val	Met	Leu	Arg	Gly	Asp	Ser	Tyr	Pro	Pro	Pro				
		100				105									

<210> 1111

<211> 385

<212> DNA

<213> Homo sapiens

<400> 1111

nnacgcgtcg ccccggtgcg cctggcagtg ggagaagagc atgaccttac cgagctcgcg
 60
 actgaactcg tcaacgccgc ctatagccgg gttgacatgg tggaaacgccg tggcgaattc
 120
 gcagtacgtg gcggcatcgt cgacgtcttc ccaccggtgc tagaacaccc ggtccgtatc
 180
 gatttttttg gtgacgagat cgaggaaatg acctccttcg cggtagccga ccagcgatcc
 240
 accgacgaga ctaccaaga actgatctgc gctccttgcc gtgagctcat cctcaccgac
 300
 gaggtacgtt cccgagccaa ggctttgctg accgaccatc ccgaattagc tgacatgttg
 360
 gagcggatcg gcaacgggtca agctt
 385

<210> 1112
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1112
 Xaa Arg Val Ala Pro Val Arg Leu Ala Val Gly Glu Glu His Asp Leu
 1 5 10 15
 Thr Glu Leu Ala Thr Glu Leu Val Asn Ala Ala Tyr Ser Arg Val Asp
 20 25 30
 Met Val Glu Arg Arg Gly Glu Phe Ala Val Arg Gly Gly Ile Val Asp
 35 40 45
 Val Phe Pro Pro Val Leu Glu His Pro Val Arg Ile Asp Phe Phe Gly
 50 55 60
 Asp Glu Ile Glu Glu Met Thr Ser Phe Ala Val Ala Asp Gln Arg Ser
 65 70 75 80
 Thr Asp Glu Thr His Gln Glu Leu Ile Cys Ala Pro Cys Arg Glu Leu
 85 90 95
 Ile Leu Thr Asp Glu Val Arg Ser Arg Ala Lys Ala Leu Leu Thr Asp
 100 105 110
 His Pro Glu Leu Ala Asp Met Leu Glu Arg Ile Gly Asn Gly Gln Ala
 115 120 125

<210> 1113
 <211> 400
 <212> DNA
 <213> Homo sapiens

<400> 1113
 nnncgaccga tgagcgatcg cgaaccgctc aacctgggat acccctacgt cgagtctttc
 60
 cactcggact tctcggggac cggcggagtc gatcagaccg accgttctac caatatcgac
 120
 gagcacacca tcgaggagat gcatcagatc gcctcgcgtt accccgactc ccgttcggcg
 180
 ttgctgccga tcctgcacct ggttcagtcg gtggacggac gcatctcgcc ggtcggtatt
 240
 gagactgcgg ctgaagtgct cggcattacc accgcccagg tatccgggggt ggcgaccttc
 300

tacaccatgt ataagaagca ccctgcgggc cagcatcaca tcggtgtctg caccacggcg
 360
 ctgtgcgccg tcatgggtgg cgaggaggtg cttgcccgtg
 400

<210> 1114
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1114
 Xaa Arg Pro Met Ser Asp Arg Glu Pro Val Asn Leu Gly Tyr Pro Tyr
 1 5 10 15
 Val Glu Ser Phe His Ser Asp Phe Ser Gly Thr Gly Gly Val Asp Gln
 20 25 30
 Thr Asp Arg Ser Thr Asn Ile Asp Glu His Thr Ile Glu Glu Met His
 35 40 45
 Gln Ile Ala Ser Arg Tyr Pro Asp Ser Arg Ser Ala Leu Leu Pro Ile
 50 55 60
 Leu His Leu Val Gln Ser Val Asp Gly Arg Ile Ser Pro Val Gly Ile
 65 70 75 80
 Glu Thr Ala Ala Glu Val Leu Gly Ile Thr Thr Ala Gln Val Ser Gly
 85 90 95
 Val Ala Thr Phe Tyr Thr Met Tyr Lys Lys His Pro Ala Gly Gln His
 100 105 110
 His Ile Gly Val Cys Thr Thr Ala Leu Cys Ala Val Met Gly Gly Glu
 115 120 125
 Glu Val Leu Ala Arg
 130

<210> 1115
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1115
 tctccgactg cacagattag agaaaggact gcgatgacca ttcgcaccac tcatgttggt
 60
 tccctgcccc gcacccccga gctgatcgag gcgaatcgtg cgcgccgtga gggttcgctc
 120
 ggcgaggctg acttcacgtc gctgctgcag gatcagggtg acggcggttg gaagcgtcag
 180
 gctgagattg gcctggatat cgtcaatgac ggcgagtacg gtcacgcgat gcttgacacg
 240
 gttgattacg gcgcgtggtg gacgtattcc atctctcggt tcggcgggct gtcctttgag
 300
 gacgtgcagc gttttgatgt gcgtcccccg gctggccgtg acggtcgcct gtctttctcg
 360
 tcgttcgctg agcgccgcga ctggcagcgt ttccggacgc gt
 402

<210> 1116
 <211> 134
 <212> PRT

<213> Homo sapiens

<400> 1116

```

Ser Pro Thr Ala Gln Ile Arg Glu Arg Thr Ala Met Thr Ile Arg Thr
1          5          10          15
Thr His Val Gly Ser Leu Pro Arg Thr Pro Glu Leu Ile Glu Ala Asn
20          25          30
Arg Ala Arg Arg Glu Gly Ser Leu Gly Glu Ala Asp Phe Thr Ser Leu
35          40          45
Leu Gln Asp Gln Val Asp Gly Val Val Lys Arg Gln Ala Glu Ile Gly
50          55          60
Leu Asp Ile Val Asn Asp Gly Glu Tyr Gly His Ala Met Leu Asp Thr
65          70          75          80
Val Asp Tyr Gly Ala Trp Trp Thr Tyr Ser Ile Ser Arg Phe Gly Gly
85          90          95
Leu Ser Phe Glu Asp Val Gln Arg Phe Asp Val Arg Pro Pro Ala Gly
100         105         110
Arg Asp Gly Arg Leu Ser Phe Ser Ser Phe Ala Glu Arg Arg Asp Trp
115         120         125
Gln Arg Phe Arg Thr Arg
130

```

<210> 1117

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1117

```

ggcgccgggtc ttgccctggc tggaagtggc atgcagacct tggcgcgga cccgctggct
60
gacccctacc tgctaggtgt atcggctggc gcaagtgtgg gagcaaccgc agtcacgcgt
120
ttgggggatgt tcacttcgtg gggaactcac cgactcactc ttggtgccct tgtaggggccc
180
ttggcggcag ctgcattggt ctatctcatt tccatggcgc aaggaggcat gacgccgctt
240
cggttggtgc tgtcgggcgt ggtgtgtgcc tcggcggttct cgcgttggcg agtttctctg
300
tcttttcg
307

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<210> 1118

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1118

```

Gly Ala Gly Leu Ala Leu Ala Gly Ser Gly Met Gln Thr Leu Val Arg
1          5          10          15
Asn Pro Leu Ala Asp Pro Tyr Leu Leu Gly Val Ser Ala Gly Ala Ser
20          25          30
Val Gly Ala Thr Ala Val Ile Ala Leu Gly Met Phe Thr Ser Trp Gly
35          40          45
Thr His Arg Leu Thr Leu Gly Ala Leu Val Gly Ala Leu Ala Ala Ala

```



```

      50              55              60
Ala Leu Val Tyr Leu Ile Ser Met Ala Gln Gly Gly Met Thr Pro Leu
65              70              75              80
Arg Leu Val Leu Ser Gly Val Val Leu Ser Ser Ala Phe Ser Arg Trp
      85              90              95
Arg Val Ser Ser Ser Phe
      100

```

<210> 1119
 <211> 353
 <212> DNA
 <213> Homo sapiens

```

<400> 1119
cgcgctccttg agatgcttga gcaggtcggt attgaggatc cagccagggt gatggattcc
60
tatccgcatac aactgtccgg tggccagcgt caacgggttc tgcttgccat ggcgttggtg
120
aactgcgcgg atctgctcat ttgtgacgag ccgacgaccg ccttggacgt cacggtgcag
180
tctcaggtac tggcgactat cgatgaggtg cttgactcgg ttggtgccgc atgcctattt
240
attacccacg atttggcggg tgtctcgcac atctgccggg agcttatcgt gatgacgtcg
300
ggcaagggtcg ttgaagccgg atcagcgcgt gatgtgttat ctcaccctga tca
353

```

<210> 1120
 <211> 117
 <212> PRT
 <213> Homo sapiens

```

<400> 1120
Arg Val Leu Glu Met Leu Glu Gln Val Gly Ile Glu Asp Pro Ala Arg
1              5              10              15
Val Met Asp Ser Tyr Pro His Gln Leu Ser Gly Gly Gln Arg Gln Arg
      20              25              30
Val Leu Leu Ala Met Ala Leu Val Asn Ser Pro Asp Leu Leu Ile Cys
      35              40              45
Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Val Gln Ser Gln Val Leu
50              55              60
Ala Thr Ile Asp Glu Val Leu Asp Ser Val Gly Ala Ala Cys Leu Phe
65              70              75              80
Ile Thr His Asp Leu Ala Val Val Ser His Ile Cys Arg Glu Leu Ile
      85              90              95
Val Met Thr Ser Gly Lys Val Val Glu Ala Gly Ser Ala Arg Asp Val
      100              105              110
Leu Ser His Pro Asp
      115

```

<210> 1121
 <211> 406
 <212> DNA
 <213> Homo sapiens

<400> 1121

tgatcaccca tgctccactc gaccgcgcgc tcgacgatgc gacggctgag acgatgctcg
 60
 cccagggcac ggtgttcac cgcaccttga cgatgatgaa aggcgtcgcc gcgaatctca
 120
 ccgcagcggg cgttcccggt gtgagctatg cacacgcccc cgagagcacg cgcgcgatgc
 180
 atgcgcggg cgttccggtc ctggccggca ccgacgccta catcgggtcc ttcacacggg
 240
 catcgccgcc atacggcgag agcatgcacg acgaagacgc ctacatcggg ctctcgaac
 300
 gggcaatgcc gccatacggc gagagcatgc acgacgaact cgctctgctc gtggacgccg
 360
 gcctgtcaac agccgaagcg ctgcgcgctg ccacctcgac gggcgc
 406

<210> 1122

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1122

Met	Leu	Ala	Gln	Gly	Thr	Val	Phe	Ile	Pro	Thr	Leu	Thr	Met	Met	Lys
1				5					10					15	
Gly	Val	Ala	Ala	Asn	Leu	Thr	Ala	Ala	Gly	Val	Pro	Gly	Val	Ser	Tyr
			20					25					30		
Ala	His	Ala	His	Glu	Ser	Thr	Arg	Ala	Met	His	Ala	Ala	Gly	Val	Pro
		35					40					45			
Val	Leu	Ala	Gly	Thr	Asp	Ala	Tyr	Ile	Gly	Ser	Phe	Thr	Arg	Ala	Ser
	50					55					60				
Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Asp	Ala	Tyr	Ile	Gly	Leu
65					70					75				80	
Leu	Glu	Arg	Ala	Met	Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Leu
			85					90					95		
Ala	Leu	Leu	Val	Asp	Ala	Gly	Leu	Ser	Thr	Ala	Glu	Ala	Leu	Arg	Ala
			100					105					110		
Ala	Thr	Ser	Thr	Gly											
			115												

<210> 1123

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1123

gccggcgatg cgttcattaa ggctaagat gcgcgcacgc ctecccgctt tctcgcctt
 60
 cgctccacc gcccttgccg cagcggggat ggtgggggtgc tcgtccgagg gggcatcgcc
 120
 aagcgaatgc tcccctgttg atattgccgc agtgcgcgag gccctgccgc attcgctcgc
 180
 taaggcgaag ctcgaccgc actccaccaa cgaggatgaa cactcctttt ccatgctcta
 240

ccgcgcgcaa gataaggagc aggtcagctt gctggggacg aagtatgagg ccgacggtgc
 300
 acccgtctgc cccgatgacc ccaatgaggc agcgcgc
 337

<210> 1124

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1124

Met	Arg	Ser	Leu	Arg	Pro	Lys	Met	Arg	Arg	Arg	Leu	Pro	Ala	Phe	Leu
1				5				10						15	
Ala	Leu	Ala	Ser	Thr	Ala	Leu	Ala	Ala	Ala	Gly	Met	Val	Gly	Cys	Ser
			20					25					30		
Ser	Glu	Gly	Ala	Ser	Pro	Ser	Glu	Cys	Ser	Pro	Val	Asp	Ile	Ala	Ala
		35				40					45				
Val	Arg	Glu	Ala	Leu	Pro	His	Ser	Leu	Ala	Lys	Ala	Lys	Leu	Asp	Pro
	50					55				60					
His	Ser	Thr	Asn	Glu	Asp	Glu	His	Ser	Phe	Ser	Met	Leu	Tyr	Arg	Ala
65				70					75					80	
Gln	Asp	Lys	Glu	Gln	Val	Ser	Leu	Leu	Gly	Thr	Lys	Tyr	Glu	Ala	Asp
			85					90					95		
Gly	Ala	Pro	Val	Cys	Pro	Asp	Asp	Pro	Asn	Glu	Ala	Ala	Arg		
		100						105					110		

<210> 1125

<211> 555

<212> DNA

<213> Homo sapiens

<400> 1125

nncttgaatc gaatcggcat tgcgtctaaa catgacgttg agacactctc tgctaagctc
 60
 gaagagctga cggcattgct agaacgtgtc gcgcgtaaac actaaggaga catcgggatg
 120
 gctgttaaaa agactactca gaaagaaggc agctcgtgga tcggggaagt tgaaaaatat
 180
 tcccgtaaaa tctggcttgc tggtttaggc gtgtactcga aggttagcag tgacggcggc
 240
 aaatacttcg agacgttggt caaggacggc gagaaggccg agaagttgac caagagccca
 300
 gtcggttaaaa aagtagaggc ggcaaaagcg agcgccggtt ctgcgaaatc gagcatttcg
 360
 gatacctggg gcaagttgga agagactttc gacaagcgtc tcaacagtgc tatttcgcga
 420
 ttgggcgtgc ccagcaaagc ggaactgaag acgctgcaca gcaaggtcga taccctgacc
 480
 aagcaaatcg aaaaactcac cggtgccaaa gtggccccgg ctaaaacggc agccgctaaa
 540
 cctgctgcc aagctt
 555

<210> 1126

<211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1126
 Met Ala Val Lys Lys Thr Thr Gln Lys Glu Gly Ser Ser Trp Ile Gly
 1 5 10 15
 Glu Val Glu Lys Tyr Ser Arg Lys Ile Trp Leu Ala Gly Leu Gly Val
 20 25 30
 Tyr Ser Lys Val Ser Ser Asp Gly Gly Lys Tyr Phe Glu Thr Leu Val
 35 40 45
 Lys Asp Gly Glu Lys Ala Glu Lys Leu Thr Lys Ser Pro Val Gly Lys
 50 55 60
 Lys Val Glu Ala Ala Lys Ala Ser Ala Gly Ser Ala Lys Ser Ser Ile
 65 70 75 80
 Ser Asp Thr Trp Gly Lys Leu Glu Glu Thr Phe Asp Lys Arg Leu Asn
 85 90 95
 Ser Ala Ile Ser Arg Leu Gly Val Pro Ser Lys Ala Glu Leu Lys Thr
 100 105 110
 Leu His Ser Lys Val Asp Thr Leu Thr Lys Gln Ile Glu Lys Leu Thr
 115 120 125
 Gly Ala Lys Val Ala Pro Ala Lys Thr Ala Ala Ala Lys Pro Ala Ala
 130 135 140
 Lys Leu
 145

<210> 1127
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 1127
 cccgaccgcg tactcgtggt cgggtgccgga gtgatgggtg cagcacacgc acacgcgctc
 60
 cgcggttccc tccaggcagt cgtgtgcggc gtggtcgacc tgcaggagcg agcagcgcaa
 120
 tcactcgctt cggaagtggg cgtaccgggg ttaccgacc tgggtgaaggc gatcgagtcg
 180
 accgctccgg acgcccgggt catcgccacg ccggactcgg ctcaccgcca accggctgag
 240
 accgccatcg acgcccgcct tgccgtcctg gtcgagaaac cgctcgccac gaccgtcgat
 300
 gacgccgaag cgatcgtgct ccgcgctgaa cgggcccggc tccgtctcat ga
 352

<210> 1128
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1128
 Pro Asp Arg Val Leu Val Val Gly Ala Gly Val Met Gly Ala Ala His
 1 5 10 15
 Ala His Ala Leu Arg Gly Ser Leu Gln Ala Val Val Cys Gly Val Val


```

      20      25      30
Asp Leu Gln Glu Arg Ala Ala Gln Ser Leu Ala Ser Glu Val Gly Val
      35      40      45
Pro Gly Phe Thr Asp Leu Val Lys Ala Ile Glu Ser Thr Ala Pro Asp
      50      55      60
Ala Ala Val Ile Ala Thr Pro Asp Ser Ala His Arg Gln Pro Ala Glu
65      70      75      80
Thr Ala Ile Asp Ala Gly Leu Ala Val Leu Val Glu Lys Pro Leu Ala
      85      90      95
Thr Thr Val Asp Asp Ala Glu Ala Ile Val Leu Arg Ala Glu Arg Ala
      100      105      110
Gly Val Arg Leu Met
      115

```

<210> 1129
 <211> 336
 <212> DNA
 <213> Homo sapiens

```

<400> 1129
ntggcagccc tggaggagcc gatggtggac ctggacggcg agctgccttt cgtgcggccc
60
ctgccccaca ttgccgtgct ccaggacgag ctgccgcaac tcttccagga tgacgacgtc
120
ggggccgatg aggaagaggc agagttgcgg ggcgaacaca cgctcacaga gaagtttgtc
180
tgcttgatg actcctttgg ccatgactgc agcttgacct gtgatgactg caggaacgga
240
gggacctgcc tcttgggcct ggatggctgg gattgccccg agggctggac tgggctcatc
300
tgcaatgaga cttggtcctc gggctgcatg gatatt
336

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<210> 1130
 <211> 112
 <212> PRT
 <213> Homo sapiens

```

<400> 1130
Xaa Ala Ala Leu Glu Glu Pro Met Val Asp Leu Asp Gly Glu Leu Pro
1      5      10      15
Phe Val Arg Pro Leu Pro His Ile Ala Val Leu Gln Asp Glu Leu Pro
      20      25      30
Gln Leu Phe Gln Asp Asp Asp Val Gly Ala Asp Glu Glu Glu Ala Glu
      35      40      45
Leu Arg Gly Glu His Thr Leu Thr Glu Lys Phe Val Cys Leu Asp Asp
      50      55      60
Ser Phe Gly His Asp Cys Ser Leu Thr Cys Asp Asp Cys Arg Asn Gly
65      70      75      80
Gly Thr Cys Leu Leu Gly Leu Asp Gly Trp Asp Cys Pro Glu Gly Trp
      85      90      95
Thr Gly Leu Ile Cys Asn Glu Thr Trp Ser Ser Gly Cys Met Asp Ile
      100      105      110

```


<210> 1131
 <211> 672
 <212> DNA
 <213> Homo sapiens

<400> 1131
 gcgttggtgg tgctcatggc ccgggaaaat ccgctggatc aatacctctt tgagcacccc
 60
 gaattattgt tctcgtcctc ggtggaatcg actgtgttgc acccgataa cccgtatgtg
 120
 ctcggcccg cagtgggccgc ggccgcccag gaggcatacc tctcccctgc ggacgaagag
 180
 ttttacgggt cggcctttgc cgggatatgc aaaacgctga caggccagaa cgtactgcga
 240
 cgtcgcggaa atcggtgtt ctggactcgt ccggaacggg ctgtcgacgc catcgacctg
 300
 cgateggcgg caggcaaagg gattgacatt atcgacgtgt ccaccgggag ggtcatcggg
 360
 gtagtcgacg aagccgccc agaccgtacc gtgcatccag gcgcggtgta cctgcatcag
 420
 ggggatcagt ggctggtcga cgaatacaac ccggtcgagc accacgccct ggtgcaccag
 480
 gacctgccgg gatattggac tcaaccgcag tcagcgtcga cggtgagaat ccttcgggag
 540
 gagagacgtc gcgcttgtgg tcccggatat gtggcgtgcg ggcaggtgga actgacagag
 600
 caagttgttg ggtatctgcg tcgcgacgaa ttcaccaatg atgtgtggta ctcgctggcc
 660
 ctcgagatgc cc
 672

<210> 1132
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 1132
 Ala Leu Val Val Leu Met Ala Arg Glu Asn Pro Leu Asp Gln Tyr Leu
 1 5 10 15
 Phe Glu His Pro Glu Leu Leu Phe Ser Ser Ser Val Glu Ser Thr Val
 20 25 30
 Leu His Pro Asp Asn Pro Tyr Val Leu Gly Pro His Val Ala Ala Ala
 35 40 45
 Ala Gln Glu Ala Tyr Leu Ser Pro Ala Asp Glu Glu Phe Tyr Gly Ser
 50 55 60
 Ala Phe Ala Gly Ile Cys Lys Thr Leu Thr Gly Gln Asn Val Leu Arg
 65 70 75 80
 Arg Arg Gly Asn Arg Leu Phe Trp Thr Arg Pro Glu Arg Ala Val Asp
 85 90 95
 Ala Ile Asp Leu Arg Ser Ala Ala Gly Lys Gly Ile Asp Ile Ile Asp
 100 105 110
 Val Ser Thr Gly Arg Val Ile Gly Val Val Asp Glu Ala Ala Ala Asp
 115 120 125
 Arg Thr Val His Pro Gly Ala Val Tyr Leu His Gln Gly Asp Gln Trp

130	135	140
Leu Val Asp Glu Tyr Asn Pro Val Glu His His Ala Leu Val His Gln		
145	150	155
Asp Leu Pro Gly Tyr Trp Thr Gln Pro Gln Ser Ala Ser Thr Val Arg		
165	170	175
Ile Leu Arg Glu Glu Arg Arg Arg Ala Cys Gly Pro Gly Tyr Val Ala		
180	185	190
Cys Gly Gln Val Glu Leu Thr Glu Gln Val Val Gly Tyr Leu Arg Arg		
195	200	205
Asp Glu Phe Thr Asn Asp Val Trp Tyr Ser Leu Ala Leu Glu Met Pro		
210	215	220

<210> 1133
 <211> 796
 <212> DNA
 <213> Homo sapiens

<400> 1133
 acgcgtgaag ggggggtccag cgggtgtggc actcgatgac aagacagttt gagagcggct
 60
 tgtctccggg gacctggcgt aggtctcctc tgccttaacc cttggctttt gcacttctct
 120
 tgtctgtcct ccatacaagc ttcttgcccc tagggaggac gggctttctta acagggggag
 180
 ccggttctctg tcttaacccc actggcatct tacactctgg gagatagctt cccctgaga
 240
 ggcgagttag ccacgtaagg ggaggtgggc gatggcttcc cttctgtctt ggggtggggg
 300
 agtcaggtag agtatttttt cttttaaaagc atcattgatc acataataag gtttgtcata
 360
 gtccttaatc acagacctgt gaaatttgga gaattcacgg cacctaggat gggagtgagc
 420
 ttctgattgt gagctgattt gggagctaac ctcaaggaaa ctctcttgc aagccccctg
 480
 ctgggtgtcg gggccttcgc caggacctc ccggggactc tggacgctct ttgtctgccc
 540
 ttctttttcc ctacacctgc tccccgtga gaaagtggg ctcatgcagc tcagctcagt
 600
 gacagagggt ttattagggg tagctctggg acccatcttt tggtgatttc ttctctctct
 660
 ttctctaattg gaataattgt ttctgtctac acttctttat ttctctctct ctacagctgc
 720
 cttctaaaaa tgtgcttttc tgttcttgca gaactgaagc ttgcatggcc tttgttgtga
 780
 ctttcccttc acgcgt
 796

<210> 1134
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1134
 Met Gly Pro Arg Ala Thr Pro Asn Lys Pro Ser Val Thr Glu Leu Ser


```

1           5           10           15
Cys Met Ser Pro Thr Phe Ser Arg Gly Ser Glu Val Arg Glu Lys Glu
          20           25           30
Gly Gln Thr Lys Ser Val Gln Ser Pro Arg Glu Val Pro Gly Glu Gly
          35           40           45
Pro Asp Thr Gln Gln Gly Ala Cys Lys Arg Ser Phe Leu Glu Val Ser
          50           55           60
Ser Gln Ile Ser Ser Gln Ser Glu Ala His Ser His Pro Arg Cys Arg
65           70           75           80
Glu Phe Ser Lys Phe His Arg Ser Val Ile Lys Asp Tyr Asp Lys Pro
          85           90           95
Tyr Tyr Val Ile Asn Asp Ala Leu Lys Glu Lys Ile Leu Tyr Leu Thr
          100          105          110
Pro Pro Thr Gln Asp Arg Arg Glu Ala Ile Ala His Leu Pro Leu Arg
          115          120          125
Gly Ser Leu Ala Ser Gln Gly Glu Ala Ile Ser Gln Ser Val Arg Cys
          130          135          140
Gln Trp Gly
145

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<210> 1135
 <211> 376
 <212> DNA
 <213> Homo sapiens

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<400> 1135
gatcaggcca cacaggacaa cttcgagaag ggctccatct tcccaccctt caccagcatc
60
agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga gctcggtctg
120
gcgacccgctc tgccctcccc cagcgacctg gtgaaatatg cagagaactg catgtacact
180
cccgtctacc gcaactaccg gtagtgctgc ggggatcaat tttgcagtaa taaaaaatct
240
actatcaacg cggatggtac tctgttgttt atagtccctg ctgctaacca cccttgttgc
300
tggtgctgct ggagaggcat tgtacctgct catgcatata tgatatatat atgttgtaac
360
gttgtgaaag caaact
376

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<210> 1136
 <211> 67
 <212> PRT
 <213> Homo sapiens

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<400> 1136
Asp Gln Ala Thr Gln Asp Asn Phe Glu Lys Gly Ser Ile Phe Pro Pro
1           5           10           15
Phe Thr Ser Ile Arg Lys Ile Ser Ala His Ile Ala Ala Val Ala
          20           25           30
Ala Lys Ala Tyr Glu Leu Gly Leu Ala Thr Arg Leu Pro Pro Pro Ser
          35           40           45
Asp Leu Val Lys Tyr Ala Glu Asn Cys Met Tyr Thr Pro Val Tyr Arg

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50
Asn Tyr Arg
65

55

60

<210> 1137
<211> 357
<212> DNA
<213> Homo sapiens

<400> 1137
acgcgtcgct ggaacccgaa gatgaagcgc ttcattctca ccgagcgcaa cggatatctac
60
atcattgacc tgcaccagtc gctgacctac attgataagg cgtacgcctt cgtcaaggag
120
actgtcgcca agggcggcca gattcttttc gtcggcacga agaagcaggc ccaggagtcc
180
atcggttgagc aggccactcg cgttggcatg ccctatgtca accagcgttg gcttggggga
240
atgctcacta atttccagac catctcgaag cgcattgccc ggctcaagga gctcgaggcc
300
atggactttg acaaggtttc cggctccggt ctcaccaaga aggagctgct tatgctc
357

<210> 1138
<211> 119
<212> PRT
<213> Homo sapiens

<400> 1138
Thr Arg Arg Trp Asn Pro Lys Met Lys Arg Phe Ile Phe Thr Glu Arg
1 5 10 15
Asn Gly Ile Tyr Ile Ile Asp Leu His Gln Ser Leu Thr Tyr Ile Asp
20 25 30
Lys Ala Tyr Ala Phe Val Lys Glu Thr Val Ala Lys Gly Gly Gln Ile
35 40 45
Leu Phe Val Gly Thr Lys Lys Gln Ala Gln Glu Ser Ile Val Glu Gln
50 55 60
Ala Thr Arg Val Gly Met Pro Tyr Val Asn Gln Arg Trp Leu Gly Gly
65 70 75 80
Met Leu Thr Asn Phe Gln Thr Ile Ser Lys Arg Ile Ala Arg Leu Lys
85 90 95
Glu Leu Glu Ala Met Asp Phe Asp Lys Val Ser Gly Ser Gly Leu Thr
100 105 110
Lys Lys Glu Leu Leu Met Leu
115

<210> 1139
<211> 456
<212> DNA
<213> Homo sapiens

<400> 1139
gtgcacaggt cgtctgaggg catgccgcgg acgatcgatc cgagtatggc ggcaccttca
60

ccaatcccggt aggaacccgtc tcgtccagca tcgaccaagg cgctgttgag gcgttcggct
 120
 tcggtaatga actcgatgcg ctcaatatcc acgggggtag cgaaatcgta gatcttgcc
 180
 agactgagggc cttggaggag cgcggccgctc ggggggacgt ggccctgcggc cgggcgttcc
 240
 ttgctctcaa ggacttcgtc gtcgcggctg acaaggaata cgtttgtgtg gtcgcctgca
 300
 atgcatgctc gagcgtggtg accatcgagg tgaaggacgg tttcggcata gaggtcatcg
 360
 tccacatcgg ccacagttag ttcgacgact cctgagtcga ctagatgacg cgccttctct
 420
 gccgcgtctt cgctgacgtc ggccaggacc gctagc
 456

<210> 1140

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1140

Met	Trp	Thr	Met	Thr	Ser	Met	Pro	Lys	Pro	Ser	Phe	Thr	Ser	Met	Val
1				5					10					15	
Thr	Thr	Leu	Glu	His	Ala	Leu	Gln	Ala	Thr	Thr	Gln	Thr	Tyr	Ser	Leu
			20					25					30		
Ser	Ala	Ala	Thr	Thr	Lys	Ser	Leu	Arg	Ala	Arg	Asn	Ala	Arg	Pro	Gln
		35					40				45				
Ala	Thr	Ser	Pro	Arg	Arg	Pro	Arg	Ser	Ser	Lys	Ala	Ser	Val	Trp	Pro
		50				55				60					
Arg	Ser	Thr	Ile	Ser	Leu	Pro	Pro	Trp	Ile	Leu	Ser	Ala	Ser	Ser	Ser
65					70				75					80	
Leu	Pro	Lys	Pro	Asn	Ala	Ser	Thr	Ala	Pro	Trp	Ser	Met	Leu	Asp	Glu
			85					90					95		
Thr	Gly	Pro	Thr	Gly	Leu	Val	Lys	Val	Pro	Pro	Tyr	Ser	Asp	Arg	Ser
		100					105						110		
Ser	Ala	Ala	Trp	Pro	Gln	Thr	Thr	Cys	Ala						
		115					120								

<210> 1141

<211> 354

<212> DNA

<213> Homo sapiens

<400> 1141

ggcgccatgc tcggcgggct ggtgctgggt gtggccgaag cctttggcgc cgatatcttc
 60
 ggcgaccagt acaaggacgt ggtggcggtt ggccctgttg ttctggtgct gttgttcgt
 120
 ccgaccggca ttctgggccc tccggagggt gagaaagtat gagcagatat cttaaactcg
 180
 cgtttttcag cgccctgttg gtgtgggccc tggcctttcc ggtactcggc ctcaagctga
 240
 gcattgtcgg gatcaaccac gaagtgcatt gcaccggctc cgtgaccttg accatcatcg
 300

ccctgtgctc ggtgccgatg ttctgcgcg tgctgtttac ccagcaagtc ggtg
354

<210> 1142
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1142
Gly Ala Met Leu Gly Gly Leu Val Leu Gly Val Ala Glu Ala Phe Gly
1 5 10 15
Ala Asp Ile Phe Gly Asp Gln Tyr Lys Asp Val Val Ala Phe Gly Leu
20 25 30
Leu Val Leu Val Leu Leu Phe Arg Pro Thr Gly Ile Leu Gly Arg Pro
35 40 45
Glu Val Glu Lys Val
50

<210> 1143
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1143
acgcgttgca catccccag gaccatcaac cgcggcattg ccgcatagac ctggagatcc
60
catgcaacgt gaaatgaagt tcgaatcgat caaggcaaag gccaaaggcga tgctcatcgg
120
cgcagccgac gacacagcaa gcgcaggcgc gaccaaccga ggggtggctca acagcgccgc
180
attcgaaatc ctggcccacg tggccgtcaa tgcccaaacac tacgcgctct ccgagagacc
240
ggcgctggag gagttcgcca agagcttcca gccgcgcaac aaccaggact acgtggccgc
300
gatcgccaag aaggccgcga accacacat gcatcccggc aggcagtcca ttt
353

<210> 1144
<211> 102
<212> PRT
<213> Homo sapiens

<400> 1144
Met His Gly Val Val Arg Gly Leu Leu Gly Asp Arg Gly His Val Val
1 5 10 15
Leu Val Val Ala Arg Leu Glu Ala Leu Gly Glu Leu Leu Gln Arg Arg
20 25 30
Ser Leu Gly Glu Arg Val Val Leu Gly Ile Asp Gly His Val Gly Gln
35 40 45
Asp Phe Glu Cys Gly Ala Val Glu Pro Pro Ser Val Gly Arg Ala Cys
50 55 60
Ala Cys Cys Val Val Gly Cys Ala Asp Glu His Arg Leu Gly Leu Cys
65 70 75 80
Leu Asp Arg Phe Glu Leu His Phe Thr Leu His Gly Ile Ser Arg Ser

Met Arg Gln Cys Arg Gly
100

85

90

95

<210> 1145
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1145
gtcttcggcg ggctcggcct gttctattgc gtcattgaccc cgggtgtactg gttctcggcc
60
catgaagtgg ccggcacctg ggtactcggg ctgtcggcgg cgatggctct gatgggtgtt
120
ttctacgtcc aggtcatcgc caagaagatc aatcctcgac cctccgacga gaaggacgcc
180
gaggtgatcg acggggctgg tccggtcggt ttcttcccgc cacagagtat ctggccgttc
240
tggtgcgcgc tegtgtgcgc catcatgtgc ctccggccga tcttcggctg gtggatctct
300
ctgctcgggc tgggcattgt tatctgggcc gcctcggggtt gggcttttga gtactaccgc
360

<210> 1146
<211> 120
<212> PRT
<213> Homo sapiens

<400> 1146
Val Phe Gly Gly Leu Gly Leu Phe Tyr Cys Val Met Thr Pro Val Tyr
1 5 10 15
Trp Phe Ser Ala His Glu Val Ala Gly Thr Trp Val Leu Gly Leu Ser
20 25 30
Ala Ala Met Ala Leu Met Val Phe Phe Tyr Val Gln Val Ile Ala Lys
35 40 45
Lys Ile Asn Pro Arg Pro Ser Asp Glu Lys Asp Ala Glu Val Ile Asp
50 55 60
Gly Ala Gly Pro Val Gly Phe Phe Pro Pro Gln Ser Ile Trp Pro Phe
65 70 75 80
Trp Cys Ala Leu Val Val Ala Ile Met Cys Leu Gly Pro Ile Phe Gly
85 90 95
Trp Trp Ile Ser Leu Leu Gly Leu Gly Ile Val Ile Trp Ala Ala Ser
100 105 110
Gly Trp Ala Phe Glu Tyr Tyr Arg
115 120

<210> 1147
<211> 409
<212> DNA
<213> Homo sapiens

<400> 1147
tgtacattgg ctatgcagtc tggcctcctg aagggttatga tagtagccaa aaatatagaa
60

gcaaaaaagg catccacctt cttcatcaat ccagaattga tcatgctcat gcctgtgggt
 120
 ggatcactat gtgctctcca aattgggagg ggaagtctac tctcctctct cctctctctc
 180
 ccaccttccc ctctctcttc tctcctttct attcccaggg cagtgggaaca tgatgaggtt
 240
 cttttccctt catggatata ctctttctgc cctccacata aaggggcatt gatggatctt
 300
 caagaatggg atgcctttcc ctagaaaggc taaatattca tgaggctgaa tgtgaggatc
 360
 cagagtacac tgaaatataa ctggatcatca gtacacatag aatctgatn
 409

<210> 1148

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1148

Met	Gln	Ser	Gly	Leu	Leu	Lys	Val	Met	Ile	Val	Ala	Lys	Asn	Ile	Glu
1				5				10					15		
Ala	Lys	Lys	Ala	Ser	Thr	Phe	Phe	Ile	Asn	Pro	Glu	Leu	Ile	Met	Leu
			20					25					30		
Met	Pro	Val	Gly	Gly	Ser	Leu	Cys	Ala	Leu	Gln	Ile	Gly	Arg	Gly	Ser
			35				40						45		
Leu	Leu	Ser	Ser	Leu	Leu	Ser	Leu	Pro	Pro	Ser	Pro	Leu	Ser	Ser	Leu
			50				55					60			
Leu	Ser	Ile	Pro	Arg	Ala	Val	Glu	His	Asp	Glu	Val	Leu	Phe	Pro	Ser
65					70					75				80	
Trp	Ile	Ser	Ser	Phe	Cys	Pro	Pro	His	Lys	Gly	Ala	Leu	Met	Asp	Leu
				85					90					95	
Gln	Glu	Trp	Asp	Ala	Phe	Pro									
							100								

<210> 1149

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1149

gtcgacttct gcatggaaaa acgcgatctg gtgattgagc acgttgcgga gatgtacggc
 60
 cgtgaggcgg tatcgagat cattaccttc ggtaccatgg cggcgaaagc ggttattcgt
 120
 gacgtgggcc gtgtactggg tcacccgtat ggcttcgtcg atcgcatctc caagctgggtg
 180
 ccgcccgatc cgggcatgac gctggaaaaa gcctttgccg ccgaaccgca gttgccggaa
 240
 atctacgagg ccgatgagga agtcaaagcg ctgatcgaca tggcgcgcaa gctgggaagg
 300
 gtgacgcgg
 309

<210> 1150

<211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1150
 Val Asp Phe Cys Met Glu Lys Arg Asp Leu Val Ile Glu His Val Ala
 1 5 10 15
 Glu Met Tyr Gly Arg Glu Ala Val Ser Gln Ile Ile Thr Phe Gly Thr
 20 25 30
 Met Ala Ala Lys Ala Val Ile Arg Asp Val Gly Arg Val Leu Gly His
 35 40 45
 Pro Tyr Gly Phe Val Asp Arg Ile Ser Lys Leu Val Pro Pro Asp Pro
 50 55 60
 Gly Met Thr Leu Glu Lys Ala Phe Ala Ala Glu Pro Gln Leu Pro Glu
 65 70 75 80
 Ile Tyr Glu Ala Asp Glu Glu Val Lys Ala Leu Ile Asp Met Ala Arg
 85 90 95
 Lys Leu Gly Arg Val Thr Arg
 100

<210> 1151
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1151
 gcgcgcattt tttgcaaccc aagcgacgtc attatggccg agtcgccggc ttatgtcggg
 60
 gcgctcaata ccttcgcctc gtaccaaact gaggtcattc acgtcgacat ggacgacagc
 120
 ggggttggttc cggaatccct gcgtgagaaa gtgactgcag cgcgtcaaga cggcaagtcg
 180
 gtgaagtcc tttacacggt tccctaactac tcgaaccctg cgggaatctc gcaatccacc
 240
 gagcgtcgcc gggagatcct agcgggtggct gacgagctgg atctgttggt gggtgaggac
 300
 aaccggtacg gggttactcaa cctcgatggg gatccactgc cgacgttgaa gtcgatggat
 360

<210> 1152
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1152
 Ala Arg Ile Phe Cys Asn Pro Ser Asp Val Ile Met Ala Glu Ser Pro
 1 5 10 15
 Ala Tyr Val Gly Ala Leu Asn Thr Phe Ala Ser Tyr Gln Thr Glu Val
 20 25 30
 Ile His Val Asp Met Asp Asp Ser Gly Leu Val Pro Glu Ser Leu Arg
 35 40 45
 Glu Lys Val Thr Ala Ala Arg Gln Asp Gly Lys Ser Val Lys Phe Leu
 50 55 60
 Tyr Thr Val Pro Asn Tyr Ser Asn Pro Ser Gly Ile Ser Gln Ser Thr


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65          70          75          80
Glu Arg Arg Arg Glu Ile Leu Ala Val Ala Asp Glu Leu Asp Leu Leu
      85          90          95
Val Val Glu Asp Asn Pro Tyr Gly Leu Leu Asn Leu Asp Gly Asp Pro
      100          105          110
Leu Pro Thr Leu Lys Ser Met Asp
      115          120

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<210> 1153

<211> 416

<212> DNA

<213> Homo sapiens

<400> 1153

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gcgtggattc gtcctggcgg cgctcgctacc gacctgcccg agaccgggct cgaccagttg
60
cgtgacctca tcaagcggat ggaaaagtac ctecccagaga tcggtcagtt ctgcaatgag
120
aatccgatct ttaaggcccc cactcagggc attggttacg ctgatctgtc tacctgtatg
180
gccctgggag ttactgggtc tgctctgcgc gctaccggcc tgccgtggga cctgcgcaag
240
accagccct attgcgatta cgacacgtat gacttcgacg tcgccacctg ggatacctgt
300
gactgttacg ggcgtttccg catccgcctg gaagagatgg accagtcggt gcgcattctc
360
aagcaatgcc tcaaacgcct cgaggacacc cagggtgacc gtaatatggt cgagga
416

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<210> 1154

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1154

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Ala Trp Ile Arg Pro Gly Gly Val Ala Thr Asp Leu Pro Glu Thr Gly
1      5      10      15
Leu Asp Gln Leu Arg Asp Leu Ile Lys Arg Met Glu Lys Tyr Leu Pro
      20      25      30
Glu Ile Gly Gln Phe Cys Asn Glu Pro Ile Phe Lys Ala Arg Thr
      35      40      45
Gln Gly Ile Gly Tyr Ala Asp Leu Ser Thr Cys Met Ala Leu Gly Val
      50      55      60
Thr Gly Pro Ala Leu Arg Ala Thr Gly Leu Pro Trp Asp Leu Arg Lys
65      70      75      80
Thr Gln Pro Tyr Cys Asp Tyr Asp Thr Tyr Asp Phe Asp Val Ala Thr
      85      90      95
Trp Asp Thr Cys Asp Cys Tyr Gly Arg Phe Arg Ile Arg Leu Glu Glu
      100      105      110
Met Asp Gln Ser Val Arg Ile Leu Lys Gln Cys Leu Lys Arg Leu Glu
      115      120      125
Asp Thr Gln Gly Asp Arg Asn Met Val Glu
      130      135

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<210> 1155
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1155
 cttaagttat tttggtcttt gcctctctcc tcaggttggtg aagattacag aaatctggga
 60
 tggcttatgg gacgcttctc agccctaagt aggaaaacag cagtgaaaat ggcaacaaaa
 120
 acatcacgca ggactggggg ttttggggaa acagctcact ttagagcagt gcagtgtaga
 180
 gctttccgtc ttctaccagg gtccaccttt aacactgttt atctgaaaat tttccccctg
 240
 gcttactcgc ttgcagctgc ccactttgca gaaagatggc gctctgatct ctacgctccc
 300
 tgttccttca gggactccat agtatttttt ttcacgcgt
 339

<210> 1156
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1156
 Met Gly Arg Phe Ser Ala Leu Ser Arg Lys Thr Ala Val Lys Met Ala
 1 5 10 15
 Thr Lys Thr Ser Arg Arg Thr Gly Gly Phe Gly Glu Thr Ala His Phe
 20 25 30
 Arg Ala Val Gln Cys Arg Ala Phe Arg Leu Leu Pro Gly Ser Thr Phe
 35 40 45
 Asn Thr Val Tyr Leu Lys Ile Phe Pro Leu Ala Tyr Ser Leu Ala Ala
 50 55 60
 Ala His Phe Ala Glu Arg Trp Arg Ser Asp Leu Tyr Ala Pro Cys Ser
 65 70 75 80
 Phe Arg Asp Ser Ile Val Phe Phe Phe Thr Arg
 85 90

<210> 1157
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1157
 nnacagcctc tctccgaccc ggcggcggtt gcacacgtcc ccgtctgagg agtattcgtg
 60
 ctggcaaaac tcgtgacccg acacctgagg gcctatcggt tgcacgttgc cgtcatcatc
 120
 gttatgcagg tttgcgcca aatcgcggcc ctgaccttgc caaccatcaa cgcagacatc
 180
 atcaacaagg gcgtcgtgac agcggatacc ggatatgtca ccaccactc cctcttcatg
 240
 ctggcggtcg ctttagggca ggccatctgc caggtcattg cggtttatct cgccgctcag
 300

gtggcgatgg gaatggggccg tgacgttcgc gacgccatct tcacccgcac ccttgacttc
 360
 tcggccccggg agatcaacaa attcggagca ccatactca ttacccggac taccaacgac
 420
 gtccag
 426

<210> 1158
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1158
 Val Leu Ala Lys Leu Val Thr Arg His Leu Arg Ala Tyr Arg Leu His
 1 5 10 15
 Val Ala Val Ile Ile Val Met Gln Val Cys Ala Gln Ile Ala Ala Leu
 20 25 30
 Thr Leu Pro Thr Ile Asn Ala Asp Ile Ile Asn Lys Gly Val Val Thr
 35 40 45
 Ala Asp Thr Gly Tyr Val Thr Thr His Ser Leu Phe Met Leu Ala Val
 50 55 60
 Ala Leu Gly Gln Ala Ile Cys Gln Val Ile Ala Val Tyr Leu Ala Ala
 65 70 75 80
 Gln Val Ala Met Gly Met Gly Arg Asp Val Arg Asp Ala Ile Phe Thr
 85 90 95
 Arg Thr Leu Asp Phe Ser Ala Arg Glu Ile Asn Lys Phe Gly Ala Pro
 100 105 110
 Ser Leu Ile Thr Arg Thr Thr Asn Asp Val Gln
 115 120

<210> 1159
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1159
 tctctccgac cgcgcctggg gcccggtggg gtcctgcggg gacgcgggcg aggacggcgc
 60
 ggacgaggca ggagcaggcc gggctctcgc catgggtcac tgtcgcctct gccacgggaa
 120
 gttttcctcg agaagcctgc gcagcatctc cgagagggcg cctggagcga gcatggagag
 180
 gccatccgca gaggagcgcg tgctcgtagc ggacttccag cgcctgcttg gtgtggetgt
 240
 ccgccaggac cccaccttgt ctccgtttgt ctgcaagagc tgccaacgcc agttctacca
 300
 gtgccacagc cttctcaagt ctttctgca gagggtcaac gcctccccgg ctggctgccc
 360
 gaagccttgt gcaaaggctc gtgcccagcc cccaacaggg gcagaggagg gagcgtgtct
 420
 ggtggatctg atca
 434

<210> 1160

<211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1160
 Met Gly His Cys Arg Leu Cys His Gly Lys Phe Ser Ser Arg Ser Leu
 1 5 10 15
 Arg Ser Ile Ser Glu Arg Ala Pro Gly Ala Ser Met Glu Arg Pro Ser
 20 25 30
 Ala Glu Glu Arg Val Leu Val Arg Asp Phe Gln Arg Leu Leu Gly Val
 35 40 45
 Ala Val Arg Gln Asp Pro Thr Leu Ser Pro Phe Val Cys Lys Ser Cys
 50 55 60
 His Ala Gln Phe Tyr Gln Cys His Ser Leu Leu Lys Ser Phe Leu Gln
 65 70 75 80
 Arg Val Asn Ala Ser Pro Ala Gly Arg Arg Lys Pro Cys Ala Lys Val
 85 90 95
 Gly Ala Gln Pro Pro Thr Gly Ala Glu Glu Gly Ala Cys Leu Val Asp
 100 105 110
 Leu Ile

<210> 1161
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 1161
 ctgcacacac accaggccac gcccacgagg acggccagtc agcatgcagc caatacaccc
 60
 acagagggat ggggagcagc cctcagtgcc agctccaaca ggcccactgc aggtcctgtc
 120
 actgcaccca aggagctgcc ttccatttca cctgacattt ccactaaggg cccagcgttt
 180
 atcattccag aagagcagca ggcagaacct tcacctcca agagctgcaa gtgcgctgtg
 240
 gcaggaaaag aagatctggc gtctgaagtc agctcctgct ctccaggaaa agagggacga
 300
 tgacatagga cttgagcaaa atgagagccc cgtgatggga gagaacacct gatca
 355

<210> 1162
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1162
 Met Gln Pro Ile His Pro Gln Arg Asp Gly Glu Gln Pro Ser Val Pro
 1 5 10 15
 Ala Pro Thr Gly Pro Leu Gln Val Leu Ser Leu His Pro Arg Ser Cys
 20 25 30
 Leu Pro Phe His Leu Thr Phe Pro Leu Arg Ala Gln Arg Leu Ser Phe
 35 40 45
 Gln Lys Ser Ser Arg Gln Asn Leu His Leu Pro Arg Ala Ala Ser Ala

50		55		60
Leu Trp Gln Glu Lys	Lys Ile Trp Arg Leu Lys	Ser Ala Pro Ala Leu		
65	70	75	80	
Gln Glu Lys Arg Asp	Asp Asp Ile Gly Leu Glu	Gln Asn Glu Ser Pro		
	85	90	95	
Val Met Gly Glu Asn Thr				
100				

<210> 1163

<211> 466

<212> DNA

<213> Homo sapiens

<400> 1163

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ngcgcgccag gaagcgggag gtcagctgta caccagggt aatagaactt ctaccctcag
60
aggagtcaaa gagaaggcag aactatggca ggaaagctcc ggaagtccca catccctgga
120
gtgagcatct ggcagctggt ggaggagatc cctgaaggct gcagcacgcc ggactttgag
180
cagaagcccg tcacctcggc tctgccagag gggaaaaatg ctgtctttcg ggctgtggtc
240
tgtggggagc ccaggcccga ggtgcgttgg cagaactcca aaggtgacct cagtgattcc
300
agcaagtaca agatctctc cagccctggc agcaaggagc acgtgctgca gatcaacaag
360
ctgacaggcg aggacacgga tctgtaccac tgcacagcag taaatgcgta cggagaggcc
420
gcttgctcag tgagactcac cgtcatcgaa gttggctttc ggaaga
466

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<210> 1164

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1164

Met Ala Gly Lys Leu Arg Lys Ser His Ile Pro Gly Val Ser Ile Trp	
1	5 10 15
Gln Leu Val Glu Glu Ile Pro Glu Gly Cys Ser Thr Pro Asp Phe Glu	
	20 25 30
Gln Lys Pro Val Thr Ser Ala Leu Pro Glu Gly Lys Asn Ala Val Phe	
	35 40 45
Arg Ala Val Val Cys Gly Glu Pro Arg Pro Glu Val Arg Trp Gln Asn	
	50 55 60
Ser Lys Gly Asp Leu Ser Asp Ser Ser Lys Tyr Lys Ile Ser Ser Ser	
65	70 75 80
Pro Gly Ser Lys Glu His Val Leu Gln Ile Asn Lys Leu Thr Gly Glu	
	85 90 95
Asp Thr Asp Leu Tyr His Cys Thr Ala Val Asn Ala Tyr Gly Glu Ala	
	100 105 110
Ala Cys Ser Val Arg Leu Thr Val Ile Glu Val Gly Phe Arg Lys	
	115 120 125

<210> 1165
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 1165
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 60
 tgcttttagta aagtccttgt tgagccgctg ctgctcaagc tcaacttgac nattatgtgt
 120
 ctgcacattc tgctgatgtc cacgttcgtg gccctgcccg gtcagttggc tgcagcagga
 180
 ttccccgcgc ctgaacactg gaaagtgtat ctggtgacga tgctcatctc cttcgtctcc
 240
 gttgtccctt tcattatcta tgcagaagtg aaacgcgcga tgaagcgcgt attcctgacg
 300
 tgtgttgccg tgctgttgat tgccgaaatc gtactatggg gctccgggtcc acacttctgg
 360
 gaactgggtca tcggcgatca gtttttcttc ctgccttcta atctcatgga agcc
 414

<210> 1166
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1166
 Trp Val Val Pro Asp Thr Xaa Asn His Val Leu Asn Arg Ile Ser Gly
 1 5 10 15
 Met Val Lys Gly Cys Phe Ser Lys Val Leu Val Glu Pro Arg Leu Leu
 20 25 30
 Lys Leu Asn Leu Thr Ile Met Cys Leu His Ile Leu Leu Met Ser Thr
 35 40 45
 Phe Val Ala Leu Pro Gly Gln Leu Ala Ala Ala Gly Phe Pro Ala Ala
 50 55 60
 Glu His Trp Lys Val Tyr Leu Val Thr Met Leu Ile Ser Phe Val Ser
 65 70 75 80
 Val Val Pro Phe Ile Ile Tyr Ala Glu Val Lys Arg Arg Met Lys Arg
 85 90 95
 Val Phe Leu Thr Cys Val Ala Leu Leu Leu Ile Ala Glu Ile Val Leu
 100 105 110
 Trp Gly Ser Gly Pro His Phe Trp Glu Leu Val Ile Gly Val Gln Leu
 115 120 125
 Phe Phe Leu Ala Phe Asn Leu Met Glu Ala
 130 135

<210> 1167
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 1167
 gtcgaccccg tgggcaagag tcgcggcccc tgacgataac ttcaccccg cggccttgag
 60

ctgttgggac cggctggcta aggcctgggc accggtagcg gcctgggtgga taccctcatg
 120
 tagccgggtg acctgcctga ccatcttcgg caaaccagtg cgcagttgtg tggatgaactc
 180
 attgaccctt cgagacagtc gtgaggaacc gtcagcaagt tcgtcgatgc cgtcgatgat
 240
 gctcttgcca gagttcggat ccttgatcgc catcgcttg acggccaccc ccgaccacgc
 300
 ccgcacgccc agggcgtagc catcggtcat cgcgtcgagg acgatgggta ccaggctcgtg
 360
 gcattcctgc gcggtgtggc ttcgcacgca tcgacgcagg aagtcagcct cgcctcgagg
 420
 cagggttccc ttactaagtt ccgcgggttt ctttcccgac gcgt
 464

<210> 1168

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1168

Met	Thr	Asp	Gly	Tyr	Ala	Leu	Gly	Val	Arg	Ala	Gly	Ser	Gly	Val	Ala
1				5					10					15	
Val	Lys	Ala	Met	Ala	Ile	Lys	Asp	Pro	Asn	Ser	Gly	Lys	Ser	Ile	Asp
		20						25					30		
Asp	Gly	Ile	Asp	Glu	Leu	Ala	Asp	Gly	Ser	Ser	Arg	Leu	Ser	Arg	Gly
	35						40					45			
Val	Asn	Glu	Phe	Thr	Thr	Gln	Leu	Arg	Thr	Gly	Leu	Pro	Lys	Met	Val
	50					55					60				
Arg	Gln	Val	Thr	Arg	Leu	His	Glu	Gly	Ile	His	Gln	Ala	Ala	Thr	Gly
65					70				75					80	
Ala	Gln	Ala	Leu	Ala	Ser	Arg	Ser	Gln	Gln	Leu	Lys	Ala	Gly	Gly	Val
			85					90					95		
Lys	Leu	Ser	Ser	Gly	Ala	Ala	Thr	Leu	Ala	His	Gly	Val	Asp		
			100					105					110		

<210> 1169

<211> 486

<212> DNA

<213> Homo sapiens

<400> 1169

nacgcgtgaa gggagcagaa cggacaccag ttactagtgg ctctgggtcgg ggacagcctc
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 ctagagcctt tctggccaat gggaacagga atagcccggg gctttctagc tgctatggac
 120
 tctgcctgga tgggtccgaag ttgggtctcta ggaacgagcc ctttggaagt gctggcagag
 180
 agggaaagta tttacagggt gctgcctcag accaccctg agaatgtgag taagaacttc
 240
 agccagtaca gtatcgaccc tgtaactcgg tatcccaata tcaacgtcaa cttcctccgg
 300
 ccaagccagg tgcgccatct atatgatact ggcgaaacaa aagatattca cctggaaatg
 360

gagagcctgg tgaattcccg aaccaccccc aaattgactc gcaatgagtc tgtagctcgt
 420
 tcaagcaaac tgctggggttg gtgccagagg cagacagatg gctatgcagg ggtaaactgtg
 480
 acagat
 486

<210> 1170
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1170
 Arg Glu Gln Asn Gly His Gln Leu Leu Val Ala Leu Val Gly Asp Ser
 1 5 10 15
 Leu Leu Glu Pro Phe Trp Pro Met Gly Thr Gly Ile Ala Arg Gly Phe
 20 25 30
 Leu Ala Ala Met Asp Ser Ala Trp Met Val Arg Ser Trp Ser Leu Gly
 35 40 45
 Thr Ser Pro Leu Glu Val Leu Ala Glu Arg Glu Ser Ile Tyr Arg Leu
 50 55 60
 Leu Pro Gln Thr Thr Pro Glu Asn Val Ser Lys Asn Phe Ser Gln Tyr
 65 70 75 80
 Ser Ile Asp Pro Val Thr Arg Tyr Pro Asn Ile Asn Val Asn Phe Leu
 85 90 95
 Arg Pro Ser Gln Val Arg His Leu Tyr Asp Thr Gly Glu Thr Lys Asp
 100 105 110
 Ile His Leu Glu Met Glu Ser Leu Val Asn Ser Arg Thr Thr Pro Lys
 115 120 125
 Leu Thr Arg Asn Glu Ser Val Ala Arg Ser Ser Lys Leu Leu Gly Trp
 130 135 140
 Cys Gln Arg Gln Thr Asp Gly Tyr Ala Gly Val Asn Val Thr Asp
 145 150 155

<210> 1171
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1171
 acgcgttcaa caaagcacag aaccggagat gcagtgggag ccgagagcag gaagcgcgga
 60
 ggcagcgcca ggtgctggcg ctgcccagg ccccggtgcca agtggggccc atagcagccg
 120
 actcgctaga ccctcccaaa acgcacacca cgcgcgacca ggaccgagag gcccgcacgg
 180
 ccctgctagg ccacaaacac tccactgtct ccagggtaaa agacaaacac agcctcgctt
 240
 gtcctccaa gagtacaacc tctgtctgat gaaaaacaaa cgaccagag aggaggcagc
 300
 tgccgggaca ctgcaggctg ggcccgccgc gcccttgag ggcaggtcaa aatcccgaa
 360
 caggcacagt gttcaggctg attgactgtc ccaggccagg gcggcctcaa ctgccagagc
 420

acctcctac
429

<210> 1172
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1172
Met Gln Trp Glu Pro Arg Ala Gly Ser Ala Glu Ala Ala Pro Gly Ala
1 5 10 15
Gly Ala Ala Arg Gly Pro Val Pro Ser Gly Ala His Ser Ser Arg Leu
20 25 30
Ala Arg Pro Ser Gln Asn Ala His His Ala Arg Pro Gly Pro Arg Gly
35 40 45
Pro His Gly Pro Ala Arg Pro Gln Thr Leu His Cys Leu Gln Gly Lys
50 55 60
Arg Gln Thr Gln Pro Arg Leu Ser Leu Gln Glu Tyr Asn Leu Cys Leu
65 70 75 80
Met Lys Asn Lys Arg Pro Arg Glu Glu Ala Ala Ala Gly Thr Leu Gln
85 90 95
Ala Gly Pro Ala Ala Pro Leu Glu Gly Arg Ser Lys Ser Arg Asn Arg
100 105 110
His Ser Val Gln Ala Asp
115

<210> 1173
<211> 435
<212> DNA
<213> Homo sapiens

<400> 1173
cgcggtcaatg acgacggcga gcattctgcc gagcaggtga tgcgagccac ccgcggtgct
60
ggacttggggg ccgaggccaa gcgtcgcatc atcttgggta cctatgcctt gtcggctggg
120
tactatgacg cctactacgg ctcggtcag aaagtccgta ccctcatcca acgcgacttc
180
gagaaagcat ggcagatgtg cgatgtgtc gtgtcaccgg ccacgccaac gactgccttc
240
cggctgggtg agcgtactgc tgacccgatg gcgatgtacc gctccgatct atgcacggtc
300
ccggccaata tggccggaag tcccgcagga tctttccga tcggtctatc agagaccgac
360
ggcatgcccg tcggcatgca ggtgatggcg ccaatcatgg cggacgatcg aatctaccga
420
gttggggccg ctcta
435

<210> 1174
<211> 145
<212> PRT
<213> Homo sapiens

<400> 1174

Arg Val Asn Asp Asp Gly Glu His Ser Ala Glu Gln Val Met Arg Ala
 1 5 10 15
 Thr Arg Gly Ala Gly Leu Gly Ala Glu Ala Lys Arg Arg Ile Ile Leu
 20 25 30
 Gly Thr Tyr Ala Leu Ser Ala Gly Tyr Tyr Asp Ala Tyr Tyr Gly Ser
 35 40 45
 Ala Gln Lys Val Arg Thr Leu Ile Gln Arg Asp Phe Glu Lys Ala Trp
 50 55 60
 Gln Met Cys Asp Val Leu Val Ser Pro Ala Thr Pro Thr Thr Ala Phe
 65 70 75 80
 Arg Leu Gly Glu Arg Thr Ala Asp Pro Met Ala Met Tyr Arg Ser Asp
 85 90 95
 Leu Cys Thr Val Pro Ala Asn Met Ala Gly Ser Pro Ala Gly Ser Phe
 100 105 110
 Pro Ile Gly Leu Ser Glu Thr Asp Gly Met Pro Val Gly Met Gln Val
 115 120 125
 Met Ala Pro Ile Met Ala Asp Asp Arg Ile Tyr Arg Val Gly Ala Ala
 130 135 140
 Leu
 145

<210> 1175

<211> 729

<212> DNA

<213> Homo sapiens

<400> 1175

gatcgactg caatccaccc acatctactt gatatgaaaa ttggtcaagg caaatatgag
 60
 caggggttct ttccaaagtt acagtcgat gtcttgcaa caggaccaac cagtaacaat
 120
 cgctgggtaa gtcggagtgc cactgcacag cgcaggaaag gacgccttcg ccagcattct
 180
 gagcatgttg ggctggacaa cgacttgagg gagaaatata tgcaagaggc acgaagtta
 240
 ggaaaaaacc tgaggcaacc caaactgtca gacctctctc ctgcagttat tgcacagacc
 300
 aactgtaaat tcgtagaagg cttattaaaa gaatgtagaa ataagacaaa gcgcatgttg
 360
 gtggagaaga tgggacatga agcgggtggaa cttggccatg gagaagcaaa catcacggc
 420
 ctggaggaga acaccttgat cgccagcctt tgtgacctgc tggagaggat atggagccat
 480
 ggcttgagg tcaagcaggg gaagtcggtt ttgtggtcac atttaattcc ttttcaggac
 540
 agagaagaga accaagagcc cttgcagaa tcaccagttg ccctcggacc agaaagaaaa
 600
 aaatctgact caggagttat gttgccaacg ctccaggtct ctcttattca ggacatgagg
 660
 catattcaaa acatgagtga gatcaagact gatgttgac gagctcgggc gtggataaga
 720
 ctgtctcta
 729

<210> 1176
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 1176
 Asp Arg Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln
 1 5 10 15
 Gly Lys Tyr Glu Gln Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu
 20 25 30
 Ala Thr Gly Pro Thr Ser Asn Asn Arg Trp Val Ser Arg Ser Ala Thr
 35 40 45
 Ala Gln Arg Arg Lys Gly Arg Leu Arg Gln His Ser Glu His Val Gly
 50 55 60
 Leu Asp Asn Asp Leu Arg Glu Lys Tyr Met Gln Glu Ala Arg Ser Leu
 65 70 75 80
 Gly Lys Asn Leu Arg Gln Pro Lys Leu Ser Asp Leu Ser Pro Ala Val
 85 90 95
 Ile Ala Gln Thr Asn Cys Lys Phe Val Glu Gly Leu Leu Lys Glu Cys
 100 105 110
 Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly His Glu Ala
 115 120 125
 Val Glu Leu Gly His Gly Glu Ala Asn Ile Thr Gly Leu Glu Glu Asn
 130 135 140
 Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His
 145 150 155 160
 Gly Leu Gln Val Lys Gln Gly Lys Ser Val Leu Trp Ser His Leu Ile
 165 170 175
 Pro Phe Gln Asp Arg Glu Glu Asn Gln Glu Pro Leu Ala Glu Ser Pro
 180 185 190
 Val Ala Leu Gly Pro Glu Arg Lys Lys Ser Asp Ser Gly Val Met Leu
 195 200 205
 Pro Thr Leu Arg Val Ser Leu Ile Gln Asp Met Arg His Ile Gln Asn
 210 215 220
 Met Ser Glu Ile Lys Thr Asp Val Gly Arg Ala Arg Ala Trp Ile Arg
 225 230 235 240
 Leu Ser Leu

<210> 1177
 <211> 581
 <212> DNA
 <213> Homo sapiens

<400> 1177
 acgcgtgatg agttgcgcga gaccagcaac tgcagccgaa tacagttttc ttgtgtaccc
 60
 cgtcgcacag ctgcgagagg tgggcattgc cgagttaggc aacgatgtct aaggcggaaa
 120
 gctcattctc ggcagacggg aagactttgt cgtcggggat gttgtcaatg agagcgggga
 180
 cgtcgatctc ggtactgccc atggcgctcat gaaggatcgc gcgatacggg ggcacgaccc
 240

cgatgagggc gtcgtcgaat ccagcgatga tcgatacctc tctcggtagc acgtccgtgg
 300
 ccaacaggtg gtcgacttgg gcgggggcta gccatgtaat tgttccgagc acatggaggg
 360
 tggctgccag gaggcggatg gccggttctg gggcatcttt ggagatcttc agccggacat
 420
 cagtgggcag tccggccggg acttggcaga gggcctgggc gggatgggag cgctgggcga
 480
 cgacgaaacg ccccgacgcc gtaacgccgt gggcttggag atcgcaggtc cacttctctg
 540
 ggctttcacc ggcagagatc atggtgtgga ccaccattgt g
 581

<210> 1178

<211> 192

<212> PRT

<213> Homo sapiens

<400> 1178

Met	Val	Val	His	Thr	Met	Ile	Ser	Ala	Gly	Glu	Ser	Pro	Glu	Lys	Trp
1				5					10					15	
Thr	Cys	Asp	Leu	Gln	Ala	His	Gly	Val	Thr	Ala	Ser	Gly	Arg	Phe	Val
			20					25					30		
Val	Ala	Gln	Arg	Ser	His	Pro	Ala	Gln	Ala	Leu	Cys	Gln	Val	Pro	Ala
			35					40					45		
Gly	Leu	Pro	Thr	Asp	Val	Arg	Leu	Lys	Ile	Ser	Lys	Asp	Ala	Pro	Glu
			50					55					60		
Pro	Ala	Ile	Arg	Leu	Leu	Ala	Ala	Thr	Leu	His	Val	Leu	Gly	Thr	Ile
								70					75		80
Thr	Trp	Leu	Ala	Pro	Ala	Gln	Val	Asp	His	Leu	Leu	Ala	Thr	Asp	Val
								85					90		95
Leu	Pro	Arg	Glu	Val	Ser	Ile	Ile	Ala	Gly	Phe	Asp	Asp	Ala	Leu	Ile
								100					105		110
Gly	Val	Val	Ala	Pro	Tyr	Arg	Ala	Ile	Leu	His	Asp	Ala	Met	Gly	Ser
								115					120		125
Thr	Glu	Ile	Asp	Val	Pro	Ala	Leu	Ile	Asp	Asn	Ile	Pro	Asp	Asp	Lys
								130					135		140
Val	Phe	Pro	Ser	Ala	Glu	Asp	Glu	Leu	Ser	Ala	Leu	Asp	Ile	Val	Ala
								145					150		155
Ser	Leu	Gly	Asn	Ala	His	Leu	Ser	Gln	Leu	Cys	Asp	Gly	Val	His	Lys
								165					170		175
Lys	Thr	Val	Phe	Gly	Cys	Ser	Cys	Trp	Ser	Arg	Ala	Thr	His	His	Ala
								180					185		190

<210> 1179

<211> 597

<212> DNA

<213> Homo sapiens

<400> 1179

gtgcactttc tggcttctaa ctgtggcccc agccctgact ccttgaggtg ctctgtgct
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 gattggggct tctggacatg ctgccacaag atgtctggaa actccagggg gcacctgccg
 120

agaccctgcc ctgggaacgg ccggaagaat cccaaaacat gagattccgg tgcagctgag
 180
 ccccgccaat tcattgtctc ttccagtcct ttctgaaggc tgcatttggc aatgtgacct
 240
 tcggggtggg gaaggcatca gaggaatata ggctatggga cggcagaggc agcgtcctgg
 300
 ggacaaagcc cacttcttcc catgcccagg gcttcctcat ggaccagca tgggtggacgt
 360
 ggccctcaga cgtccatggg tgggtggggga ggcacgtgct gtttggccct gtctctgctc
 420
 agagtctcat aggaagatgc atgggtccaca caacagtgag tcggcagggga gtccaggctt
 480
 cccctcccaa ccagtgggtg tgagacgctt gggtttataac ccaagatccc ttgtccatt
 540
 ggtgcctcct gaatctccca cctcccgagg cacctgcatg gcctctacct gacgcgt
 597

<210> 1180

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1180

Met	Gly	Arg	Gln	Arg	Gln	Arg	Pro	Gly	Asp	Lys	Ala	His	Phe	Phe	Pro
1				5					10					15	
Cys	Pro	Gly	Leu	Pro	His	Gly	Pro	Ser	Met	Val	Asp	Val	Ala	Leu	Arg
			20					25					30		
Arg	Pro	Trp	Val	Val	Gly	Glu	Ala	Arg	Ala	Val	Trp	Pro	Cys	Leu	Cys
			35				40					45			
Ser	Glu	Ser	His	Arg	Lys	Met	His	Gly	Pro	His	Asn	Ser	Glu	Ser	Ala
	50					55					60				
Gly	Ser	Pro	Gly	Phe	Pro	Ser	Gln	Pro	Val	Val	Leu	Arg	Arg	Leu	Val
65					70					75				80	
Tyr	Asn	Pro	Arg	Ser	Leu	Val	Pro	Leu	Val	Pro	Pro	Glu	Ser	Pro	Thr
			85					90						95	
Ser	Arg	Gly	Thr	Cys	Met	Ala	Ser	Thr							
			100					105							

<210> 1181

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1181

gtcgactacc tcgatgtttc cccgcgtcag atgggtctccg tggtactgc catgattccg
 60
 ttctctgagc acgacgacgc taaccgtgcc ctgatgggtg cgaacatgca gcgtcaggct
 120
 gtgccgctgc tgcgttcgga ggctccgttc gtcggtaccg gtatggagca gcgtgctgct
 180
 tacgacgccg gcgatgtcat tgctgcttcg gccacaggtg tggctcgagac cgtgtcggca
 240
 ggcttcatca ccatcatgga cgatgagggc cagcgccaca cctacctgct gcgcaagttc
 300

gagcgcacca accagggcac ctgctacaac cagaagccac tggtgacgag gg
352

<210> 1182
<211> 117
<212> PRT
<213> Homo sapiens

<400> 1182
Val Asp Tyr Leu Asp Val Ser Pro Arg Gln Met Val Ser Val Ala Thr
1 5 10 15
Ala Met Ile Pro Phe Leu Glu His Asp Asp Ala Asn Arg Ala Leu Met
20 25 30
Gly Ala Asn Met Gln Arg Gln Ala Val Pro Leu Leu Arg Ser Glu Ala
35 40 45
Pro Phe Val Gly Thr Gly Met Glu Gln Arg Ala Ala Tyr Asp Ala Gly
50 55 60
Asp Val Ile Val Ala Ser Ala Thr Gly Val Val Glu Thr Val Ser Ala
65 70 75 80
Gly Phe Ile Thr Ile Met Asp Asp Glu Gly Gln Arg His Thr Tyr Leu
85 90 95
Leu Arg Lys Phe Glu Arg Thr Asn Gln Gly Thr Cys Tyr Asn Gln Lys
100 105 110
Pro Leu Leu Thr Arg
115

<210> 1183
<211> 432
<212> DNA
<213> Homo sapiens

<400> 1183
gatccttctg ggcgtgggtc caagcgcgtg gtgaggccgt cctctcctgc agaaccgccg
60
cctcttcgcc cctgcccgtc cacctgttct gtccctgtca cctcctccag gaagcctgcc
120
tggccttctc catgctgatg ggcgtggccc ttgtccctgc agccatgcat tgacctccgt
180
ggctcctgga ggccaggcca cgtcctcatc ccctctgggt gaggagagg cacagcctgg
240
gtgcgtgggg ccgtggcggc tccgaggcgc caccgctgtg tcctctcatg agtgggtgcc
300
gtccaggtct gtccctgggt ggctgcgagg aggaggttgg cctcgcgcgg ccattgtcgt
360
gacagtggag acatcgccag cctcctgctt gcacagctga cggcagcccc tctctctcca
420
gcatgtccc ca
432

<210> 1184
<211> 141
<212> PRT
<213> Homo sapiens

<400> 1184

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Met Ala Gly Glu Arg Gly Ala Ala Val Ser Cys Ala Ser Arg Arg Leu
 1           5           10           15
Ala Met Ser Pro Leu Ser Arg Thr Trp Pro Arg Glu Ala Asn Leu Leu
      20           25           30
Leu Ala Ala Ser Pro Gly Gln Thr Trp Thr Ala Pro Thr His Glu Arg
      35           40           45
Thr Gln Arg Trp Arg Leu Gly Ala Ala Thr Ala Pro Arg Thr Gln Ala
      50           55           60
Val Pro Leu Thr His Pro Glu Gly Met Arg Thr Trp Pro Gly Leu Gln
      65           70           75           80
Glu Pro Arg Arg Ser Met His Gly Cys Arg Asp Lys Gly His Ala His
      85           90           95
Gln His Gly Glu Gly Gln Ala Gly Phe Leu Glu Glu Val Ser Arg Thr
      100           105           110
Glu Gln Val Ser Gly Gln Gly Arg Arg Gly Arg Gly Ser Ala Gly Glu
      115           120           125
Asp Gly Leu Thr Thr Arg Leu Asp Gln Arg Pro Glu Gly
      130           135           140

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<210> 1185

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1185

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accggtgaat ttggccttaa cagcgatgga actcctggcc catcttatga acctggcatg
60
gaattacgcg gcaaatatgt attgttgggt gaaggtgtac ggggctctct atctaaacaa
120
gtcatcaata aataccaatt atccgagggt catgaaccac aaaagttcgg ccttggttta
180
aaagaaattt gggaaataga cccagaaaaa cacaagaag gcagagtcag tcataccatg
240
ggctggccat taaatggcaa tgctggcggc ggttctttta tttatcatgc agaaaacaat
300
caagtcttta tcggctttgt ggtgcatctt aattacgcca acccttacct atccccttac
360
caagaatttc aacgctttaa acaccatccg attatcgagg agctattaac tggcggtaaa
420
cgc
423

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<210> 1186

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1186

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Thr Gly Glu Phe Gly Leu Asn Ser Asp Gly Thr Pro Gly Pro Ser Tyr
 1           5           10           15
Glu Pro Gly Met Glu Leu Arg Gly Lys Tyr Val Leu Leu Gly Glu Gly
      20           25           30
Val Arg Gly Ser Leu Ser Lys Gln Val Ile Asn Lys Tyr Gln Leu Ser

```


35						40						45					
Glu	Gly	His	Glu	Pro	Gln	Lys	Phe	Gly	Leu	Gly	Leu	Lys	Glu	Ile	Trp		
50						55						60					
Glu	Ile	Asp	Pro	Glu	Lys	His	Lys	Glu	Gly	Arg	Val	Ser	His	Thr	Met		
65						70						75			80		
Gly	Trp	Pro	Leu	Asn	Gly	Asn	Ala	Gly	Gly	Gly	Ser	Phe	Ile	Tyr	His		
			85						90						95		
Ala	Glu	Asn	Asn	Gln	Val	Phe	Ile	Gly	Phe	Val	Val	His	Leu	Asn	Tyr		
			100						105						110		
Ala	Asn	Pro	Tyr	Leu	Ser	Pro	Tyr	Gln	Glu	Phe	Gln	Arg	Phe	Lys	His		
			115						120						125		
His	Pro	Ile	Ile	Ala	Glu	Leu	Leu	Thr	Gly	Gly	Lys	Arg					
130						135						140					

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<210> 1187
<211> 387
<212> DNA
<213> Homo sapiens
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<400> 1187
acgcgtgctg gtgagtttaa attgaatgct gatggtaatt tggtgacgaa ttcagggggct
60
aagggtccagg gctataatgc aatagatggc atagtcggtg ggaacttaga agatatggta
120
gtaccactctg ctccaatttc tctcaagca acatcaagtg ttgatttaaa agtgaatctt
180
aattccgaag gtgaggatgt gccgccttat attcgagcgg actttgatcc agccaatcca
240
gatacttatg actatactca gacccaaacg gttgcggatg ggagtggttaa taatcattta
300
attagttatt actatgctaa aagtgatgta gcaaatacct atcaggttta tgccacggta
360
gatgggaagt cgactgatga taccggt
387
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<210> 1188
<211> 129
<212> PRT
<213> Homo sapiens
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<400> 1188															
Thr	Arg	Ala	Gly	Glu	Phe	Lys	Leu	Asn	Ala	Asp	Gly	Asn	Leu	Val	Thr
1				5				10					15		
Asn	Ser	Gly	Ala	Lys	Val	Gln	Gly	Tyr	Asn	Ala	Ile	Asp	Gly	Ile	Val
			20				25						30		
Gly	Gly	Asn	Leu	Glu	Asp	Met	Val	Val	Pro	Thr	Ala	Arg	Ile	Ser	Pro
		35				40					45				
Gln	Ala	Thr	Ser	Ser	Val	Asp	Leu	Lys	Val	Asn	Leu	Asn	Ser	Glu	Gly
	50				55					60					
Glu	Asp	Val	Pro	Pro	Tyr	Ile	Arg	Ala	Asp	Phe	Asp	Pro	Ala	Asn	Pro
65					70				75					80	
Asp	Thr	Tyr	Asp	Tyr	Thr	Gln	Thr	Gln	Thr	Val	Ala	Asp	Gly	Ser	Gly
			85					90					95		
Asn	Asn	His	Leu	Ile	Ser	Tyr	Tyr	Tyr	Ala	Lys	Ser	Asp	Val	Ala	Asn

100 105 110
 Thr Tyr Gln Val Tyr Ala Thr Val Asp Gly Lys Ser Thr Asp Asp Thr
 115 120 125
 Gly

<210> 1189
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1189
 tcgatacgccg accgcccggg ccttgccccc ggcatgatcg gtggcctgtt ggccagcacc
 60
 ctgggtgctg gtttcattgg cggcatcggt gcagggttttc tggccgggta cagcgccaag
 120
 gccattgccc gctgggcacg gctgcccagc agcctggatg cgctcaaacc gattctgatc
 180
 atttcgctgc tggccagcct gttcactggg ttggtgatga tctacgtggc cggccagccg
 240
 gtggcgggcca tgctcggagg cctgacacac tttctcgaca gcatgggtac caccaacgcc
 300
 attctcctgg gcntgttgct cggcgggctag
 330

<210> 1190
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1190
 Ser Ile Ala Asp Arg Pro Gly Leu Ala Pro Gly Met Ile Gly Gly Leu
 1 5 10 15
 Leu Ala Ser Thr Leu Gly Ala Gly Phe Ile Gly Gly Ile Val Ala Gly
 20 25 30
 Phe Leu Ala Gly Tyr Ser Ala Lys Ala Ile Ala Arg Trp Ala Arg Leu
 35 40 45
 Pro Ser Ser Leu Asp Ala Leu Lys Pro Ile Leu Ile Ile Ser Leu Leu
 50 55 60
 Ala Ser Leu Phe Thr Gly Leu Val Met Ile Tyr Val Val Gly Gln Pro
 65 70 75 80
 Val Ala Ala Met Leu Gly Gly Leu Thr His Phe Leu Asp Ser Met Gly
 85 90 95
 Thr Thr Asn Ala Ile Leu Leu Gly Xaa Leu Leu Gly Gly
 100 105

<210> 1191
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1191
 cggccgacga tgtgcgggtga gcaagagatt tggagagcca tgatgacgtc agcagacaaa
 60

gcagggacta acggacagac catgcagaca ccgccggtgg tgcgccgca ggactgggag
 120
 gcagcccgtc agcaactgct cgtgaaggaa aaggcgcata cccgtgcccg cgacgcactc
 180
 gccgccgaac ggaggcgcat gccgtggatg gaagtgacaa aaacctacgc attcgaggcg
 240
 ccctcgggca aggccagtct gctcgatctg ttccagggcc ggaagcagct gatcctgtac
 300
 cgggccttct tcgagccggg cgtgttcggc tggcccagacc atgcctgccg c
 351

<210> 1192

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1192

Met	Cys	Gly	Glu	Gln	Glu	Ile	Trp	Arg	Ala	Met	Met	Thr	Ser	Ala	Asp
1				5					10					15	
Lys	Ala	Gly	Thr	Asn	Gly	Gln	Thr	Met	Gln	Thr	Pro	Pro	Val	Val	Ser
			20					25					30		
Pro	Gln	Asp	Trp	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Val	Lys	Glu	Lys
			35				40					45			
Ala	His	Thr	Arg	Ala	Arg	Asp	Ala	Leu	Ala	Ala	Glu	Arg	Arg	Arg	Met
	50					55					60				
Pro	Trp	Met	Glu	Val	Thr	Lys	Thr	Tyr	Ala	Phe	Glu	Ala	Pro	Ser	Gly
65					70				75					80	
Lys	Ala	Ser	Leu	Leu	Asp	Leu	Phe	Gln	Gly	Arg	Lys	Gln	Leu	Ile	Leu
			85					90					95		
Tyr	Arg	Ala	Phe	Phe	Glu	Pro	Gly	Val	Phe	Gly	Trp	Pro	Asp	His	Ala
			100				105						110		
Cys	Arg														

<210> 1193

<211> 722

<212> DNA

<213> Homo sapiens

<400> 1193

ggatcccagc ctccagatcc catctttagt ctcttctttc tctacactna ggttgetccc
 60
 cgacttagga cgcccagttt gtactcagtg tttgctcttt tatggcagag cctctgcaact
 120
 cccagcctcc tggcccccttc tgtacatgat tttccttggt gccactccat gcattttttct
 180
 tggctcagga cttagtgggc ctccatggga cttggtacct ctacttggtc ccttctggaa
 240
 tctgtaactt tgtgttcccc accattcttt cttttatgaa ccgatgggtgc aacagcatga
 300
 ctacctgaaa ttcttagtca ctcccagctg ctttagtgga gggaaaatgc ccacagcaca
 360
 ggaaatagtc ctgcccttcg agagaggcca ggggatggga gcgtgtccag agaagggcga
 420

tgggttgatg aaggggtggcc acagcgcccc ggaggaaggg gccagaacgc tctctgttct
 480
 gttccatgag gaggattatg ttggtgtgtg tagtcccctg gttcagagtt gtccagaaat
 540
 agtcagtgt aaggaacaat ttcccaaaga tcaaaagagc tgtctcaaga tagcagtgcg
 600
 ttcccagccc ctacaggtgt atacagcaca aaggaggga cccctagtgt tggctgtcac
 660
 agaggggaagt ggacgtcctg tggtttgacc ccaccagatg gctttagaga tctgggccccg
 720
 ag
 722

<210> 1194

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1194

Met	Val	Gln	Gln	His	Asp	Tyr	Leu	Lys	Phe	Leu	Val	Thr	Pro	Ser	Cys
1				5					10					15	
Phe	Ser	Gly	Gly	Lys	Met	Pro	Thr	Ala	Gln	Glu	Ile	Val	Leu	Pro	Phe
		20						25					30		
Glu	Arg	Gly	Gln	Gly	Met	Gly	Ala	Cys	Pro	Glu	Lys	Gly	Asp	Gly	Leu
		35					40					45			
Met	Lys	Gly	Gly	His	Ser	Ala	Arg	Glu	Glu	Gly	Ala	Arg	Thr	Leu	Ser
	50					55					60				
Val	Leu	Phe	His	Glu	Glu	Asp	Tyr	Val	Gly	Val	Cys	Ser	Pro	Leu	Val
65				70						75				80	
Gln	Ser	Cys	Pro	Glu	Ile	Ala	Gln	Cys	Lys	Glu	Gln	Phe	Ser	Lys	Asp
			85						90					95	
Gln	Lys	Ser	Cys	Leu	Lys	Ile	Ala	Val	Arg	Ser	Gln	Pro	Leu	Gln	Val
		100					105						110		
Tyr	Thr	Ala	Gln	Arg	Glu	Gly	Pro	Ser	Val	Ala	Val	Thr	Glu	Gly	
		115					120					125			
Ser	Gly	Arg	Pro	Val	Val										
		130													

<210> 1195

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1195

tctagagcat gatattccgc gggcgcgccc ggggtggactt tggttcgaga gtggaactaa
 60
 gtgagtaatg ggggcggcgc ggccagacgc gctcccagcc tcctggcgag agtgctgccc
 120
 ggtttcccg gggcacggga gtgtgtctag gaggggaggc caggatcctt cctcgagtcc
 180
 tgtcctgaac aaaagaaaac gaggtgggtg gtgcttgaac ggccctgttt actctgcaga
 240
 tagccgaact ggtaggactc cggcgcgccc tatttatctt gattggctct gcctgaaggc
 300

aagcgtaaata cccgtccaac ctgtatcact gcgaagagct cgttcgggag cgctttttgg
 360
 aaatgcagat tcttagcccc cacccagatc t
 391

<210> 1196

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1196

Met	Gly	Ala	Ala	Arg	Pro	Asp	Ala	Leu	Pro	Ala	Ser	Trp	Arg	Glu	Cys
1				5					10					15	
Cys	Pro	Val	Ser	Arg	Gly	His	Gly	Ser	Val	Ser	Arg	Arg	Gly	Gly	Gln
			20					25					30		
Asp	Pro	Ser	Ser	Ser	Pro	Val	Leu	Asn	Lys	Arg	Lys	Arg	Gly	Gly	Trp
			35				40					45			
Cys	Leu	Asn	Gly	Pro	Val	Tyr	Ser	Ala	Asp	Ser	Arg	Thr	Gly	Arg	Thr
	50					55				60					
Pro	Ala	Arg	Pro	Ile	Tyr	Leu	Asp	Trp	Leu	Cys	Leu	Lys	Ala	Ser	Val
65					70				75					80	
Asn	Pro	Val	Gln	Pro	Val	Ser	Leu	Arg	Arg	Ala	Arg	Ser	Gly	Ala	Leu
			85					90						95	
Phe	Gly	Asn	Ala	Asp	Ser										
															100

<210> 1197

<211> 386

<212> DNA

<213> Homo sapiens

<400> 1197

acgcgtgatg atcatgaaaa tggtagacagag cgtctagcag aagtcgcctc tgtgatgggc
 60
 tggcagcaag atgaaatcat cgttaacgta caaggggatg aaccctttct gcctgttgca
 120
 cttattcatg ccacgggttaa agcgtagcc gatgatgctg aatctgaaat ggccacgatt
 180
 gcctgtgcga ttgataacgt agcagagctg ttttaaccaa atgtagttaa agtcgtttgt
 240
 gatgaaaaac agcgcgcctt gtatttcagt cgtgcgccta tgccatggga ccgtaatggg
 300
 tttatggaaa aaacagacga tcaagcggtta ccagcggatt ttctgcgtt gcgtcatatt
 360
 ggtccgtatg tttaccgcac gacatn
 386

<210> 1198

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1198

Thr Arg Asp Asp His Glu Asn Gly Thr Glu Arg Leu Ala Glu Val Ala


```

      1             5             10             15
Ser Val Met Gly Trp Gln Gln Asp Glu Ile Ile Val Asn Val Gln Gly
      20             25             30
Asp Glu Pro Phe Leu Pro Val Ala Leu Ile His Ala Thr Val Lys Ala
      35             40             45
Leu Ala Asp Asp Ala Glu Ser Glu Met Ala Thr Ile Ala Cys Ala Ile
      50             55             60
Asp Asn Val Ala Glu Leu Phe Asn Pro Asn Val Val Lys Val Val Cys
65      70             75             80
Asp Glu Lys Gln Arg Ala Leu Tyr Phe Ser Arg Ala Pro Met Pro Trp
      85             90             95
Asp Arg Asn Gly Phe Met Glu Lys Thr Asp Asp Gln Ala Leu Pro Ala
      100            105            110
Asp Phe Pro Ala Leu Arg His Ile Gly Pro Tyr Val Tyr Arg Thr Thr
      115            120            125

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<210> 1199

<211> 318

<212> DNA

<213> Homo sapiens

<400> 1199

```

acgcgttcag cgatcatgtac agccccgggc cgggtcaattt gatgggcctc aatgccgggc
60
ttacgggcaa attgcgtcgc tccagcgggt tctacatcgg cgtgggggtgc gcgatgctgc
120
tgatggtcgg gctggttggg ctcaccggcg aagcgatcat ctcccaggcg gcgctgccgt
180
atatttcttt gattggcggg gtgtacacgc tgtacctcgc ctaccaggtg ttcaccgcac
240
gtaccgaagt ggatgacgcc ccaagcgcg ctcgccaagac cttgaccttc tggaatggcc
300
tggtgatcca gttgctcc
318

```

<210> 1200

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1200

```

Met Tyr Ser Pro Gly Pro Val Asn Leu Met Gly Leu Asn Ala Gly Leu
      1             5             10             15
Thr Gly Lys Leu Arg Arg Ser Ser Gly Phe Tyr Ile Gly Val Gly Cys
      20             25             30
Ala Met Leu Leu Met Val Gly Leu Val Gly Leu Thr Gly Glu Ala Ile
      35             40             45
Ile Ser Gln Ala Ala Leu Pro Tyr Ile Ser Leu Ile Gly Gly Val Tyr
      50             55             60
Thr Leu Tyr Leu Ala Tyr Gln Val Phe Thr Ala Arg Thr Glu Val Asp
65      70             75             80
Asp Ala Pro Ser Ala Pro Ala Lys Thr Leu Thr Phe Trp Asn Gly Leu
      85             90             95
Val Ile Gln Leu Leu

```


100

<210> 1201
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1201
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 60
 atgatacctca ccgtgctgcg catggccaag gatgaccgca accgttggaa tgcaaaaatc
 120
 acgctgcagg cgatccgcga gctggataac gccttccgcg tgctggaaca gttcaagggc
 180
 cgccgcaagg tcacgggtgtt tggctcggcg cgcacgccgg tcgaaagccc gctgtacgcc
 240
 ttggcaaggg aagtcggttc gctgctggcg caatccgacc tgatggtgat caccggcggt
 300
 ggcggcgcca tcatggccgc tgcccacgag ggcgcaaggt ctggaacaca gcctgggggt
 360

<210> 1202
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1202
 Val Asp Ala Gln Leu Gln Leu Val Ala Pro Asn Ser Pro Asn Ile Pro
 1 5 10 15
 Leu Tyr Arg Asp Met Ile Leu Thr Val Leu Arg Met Ala Lys Asp Asp
 20 25 30
 Arg Asn Arg Trp Asn Ala Lys Ile Thr Leu Gln Ala Ile Arg Glu Leu
 35 40 45
 Asp Asn Ala Phe Arg Val Leu Glu Gln Phe Lys Gly Arg Arg Lys Val
 50 55 60
 Thr Val Phe Gly Ser Ala Arg Thr Pro Val Glu Ser Pro Leu Tyr Ala
 65 70 75 80
 Leu Ala Arg Glu Val Gly Thr Leu Leu Ala Gln Ser Asp Leu Met Val
 85 90 95
 Ile Thr Gly Gly Gly Gly Gly Ile Met Ala Ala Ala His Glu Gly Ala
 100 105 110
 Arg Ser Gly Thr Gln Pro Gly Gly
 115 120

<210> 1203
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 1203
 ccggatatgg cagctcgact tcattcgacc agagttcttg gaacatttgg ctatcatgca
 60
 cctgagtatg caatgactgg acaacttagc tctaagagtg acgtttacag ttttgaggtt
 120

ggtcttcttg agctcctgac tggaagaaag cctgtggatc ttccattacc aagaggacag
 180
 caaagtcttg tgacatgggc aactccacgg ctttgtgaag ataaagttag gcaatgcgtt
 240
 gattcaagac ttggagtaga atatcctcct aaatccggtg caaagtttgc agctgttgct
 300
 gcactgtgtg tgcaatatga agctgacttt cgaccaaca tgagcatcgt ggtgaaggcg
 360
 cttcagcccc tgctgaatgc acgtgcatcc aacaaccctg gatgaatgaa tgaatgactg
 420
 ccgttgcttt tccctgacga gagtatctga atcagacaat catgtagcat tgaattc
 477

<210> 1204

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1204

Pro	Asp	Met	Ala	Ala	Arg	Leu	His	Ser	Thr	Arg	Val	Leu	Gly	Thr	Phe
1				5					10					15	
Gly	Tyr	His	Ala	Pro	Glu	Tyr	Ala	Met	Thr	Gly	Gln	Leu	Ser	Ser	Lys
			20					25					30		
Ser	Asp	Val	Tyr	Ser	Phe	Gly	Val	Gly	Leu	Leu	Glu	Leu	Leu	Thr	Gly
		35				40					45				
Arg	Lys	Pro	Val	Asp	Leu	Pro	Leu	Pro	Arg	Gly	Gln	Gln	Ser	Leu	Val
	50				55					60					
Thr	Trp	Ala	Thr	Pro	Arg	Leu	Cys	Glu	Asp	Lys	Val	Arg	Gln	Cys	Val
65					70				75					80	
Asp	Ser	Arg	Leu	Gly	Val	Glu	Tyr	Pro	Pro	Lys	Ser	Val	Ala	Lys	Phe
			85					90						95	
Ala	Ala	Val	Ala	Ala	Leu	Cys	Val	Gln	Tyr	Glu	Ala	Asp	Phe	Arg	Pro
		100						105					110		
Asn	Met	Ser	Ile	Val	Val	Lys	Ala	Leu	Gln	Pro	Leu	Leu	Asn	Ala	Arg
		115				120						125			
Ala	Ser	Asn	Asn	Pro	Gly										
		130													

<210> 1205

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1205

acgcgttgcc attgaagact ggcaattaca cgatttacac atcattgatg ctgcagttga
 60
 tgtgcacagg gaaacactag ctaccgtgca gcaggaaatg atgggagaaa tcagccatgg
 120
 taacaagaac caagccatcc tggacacaga cggccggggg tgtgcgaacg gaacgttagt
 180
 ctatcaatgt gttgcggaac gattcaaggg atgctggccc ccccatcac ttgccaatc
 240
 aagatgtgga gggaatctgt ctgcgagaa cctggatctc gtggtgttac gacgttgtcc
 300

ccttctcgct cggacgccgc tcattgctccg ccacgtcgct gagcgagtga caaggtatcc
 360
 tgggaccatg cgtatgggtt caactgaagc gctggcgaat cgtaaan
 407

<210> 1206
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1206
 Met Met Gly Glu Ile Ser His Gly Asn Lys Asn Gln Ala Ile Leu Asp
 1 5 10 15
 Thr Asp Gly Arg Gly Cys Ala Asn Gly Thr Leu Val Tyr Gln Cys Val
 20 25 30
 Ala Glu Arg Phe Lys Gly Cys Trp Pro Pro Pro Ser Leu Ala Gln Ser
 35 40 45
 Arg Cys Gly Gly Asn Leu Ser Ala Gln Asn Leu Asp Leu Val Val Val
 50 55 60
 Arg Arg Cys Pro Leu Leu Ala Arg Thr Pro Leu Met Leu Arg His Val
 65 70 75 80
 Ala Glu Arg Val Thr Arg Tyr Pro Gly Thr Met Arg Met Val Ser Thr
 85 90 95
 Glu Ala Leu Ala Asn Arg Lys
 100

<210> 1207
 <211> 292
 <212> DNA
 <213> Homo sapiens

<400> 1207
 gctagcatgt cacttttttc ttcagtagat ggcactggag agacattgca ggatgaagag
 60
 gcttgcttcc attcctatgt gctttcccg ccttgcttct ccagccatgt gtgggacaac
 120
 caggggtgct caccacctag tgagtttcag ggacactcca catgtcccag caagtcttat
 180
 cagcatctta gctggcttct caacaagact cagtggcacc cctgtggatg tctcccatca
 240
 agtttcatta gtgccccagg gggagactcc cagaaagttt cagcagcacc ac
 292

<210> 1208
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1208
 Met Ser Leu Phe Ser Ser Val Asp Gly Thr Gly Glu Thr Leu Gln Asp
 1 5 10 15
 Glu Glu Ala Cys Leu His Ser Tyr Val Leu Ser Arg Pro Cys Phe Ser
 20 25 30
 Ser His Val Trp Asp Asn Gln Gly Cys Ser Pro Pro Ser Glu Phe Gln


```

      35              40              45
Gly His Ser Thr Cys Pro Ser Lys Ser Tyr Gln His Leu Ser Trp Leu
      50              55              60
Leu Asn Lys Thr Gln Trp His Pro Cys Gly Cys Leu Pro Ser Ser Phe
65              70              75              80
Ile Ser Ala Pro Gly Gly Asp Ser Gln Lys Val Ser Ala Ala Pro
      85              90              95

```

<210> 1209
 <211> 431
 <212> DNA
 <213> Homo sapiens

```

<400> 1209
ttggttccta taatggcggg agcttacatt tttgctggta tcattatttt gttaatgcat
60
gccagtgaag ttattccggc aatatcaact attgtcgagt atgcctttac gccagcttct
120
gcgcagggtg gttttgctgg tgcaacggta tggatggcga ttcgttttgg tgttgcccg
180
ggtgtatttt caaatgaggc aggtttaggt tcggcgccga tcgctcatgc cagtgcacaa
240
actaatgaac cggttcgcca agggttgggt gcgatgtag gtactttcct tgatacactt
300
attatttgta caggtttagt gattgttatt tctggtgctt ggacagaagg attgtcgggt
360
gctgcgttaa catctgctgc atttaatctg gcgttacctg gttggggggg atacttagtc
420
gctatcagct g
431

```

<210> 1210
 <211> 143
 <212> PRT
 <213> Homo sapiens

```

<400> 1210
Leu Val Pro Ile Met Ala Val Ala Tyr Ile Phe Ala Gly Ile Ile Ile
1      5      10      15
Leu Leu Met His Ala Ser Glu Val Ile Pro Ala Ile Ser Thr Ile Val
      20      25      30
Glu Tyr Ala Phe Thr Pro Ala Ser Ala Gln Gly Gly Phe Ala Gly Ala
      35      40      45
Thr Val Trp Met Ala Ile Arg Phe Gly Val Ala Arg Gly Val Phe Ser
      50      55      60
Asn Glu Ala Gly Leu Gly Ser Ala Pro Ile Ala His Ala Ser Ala Gln
65      70      75      80
Thr Asn Glu Pro Val Arg Gln Gly Leu Val Ala Met Leu Gly Thr Phe
      85      90      95
Leu Asp Thr Leu Ile Ile Cys Thr Gly Leu Val Ile Val Ile Ser Gly
      100     105     110
Ala Trp Thr Glu Gly Leu Ser Gly Ala Ala Leu Thr Ser Ala Ala Phe
      115     120     125
Asn Leu Ala Leu Pro Gly Trp Gly Gly Tyr Leu Val Ala Ile Ser

```


130

135

140

<210> 1211

<211> 480

<212> DNA

<213> Homo sapiens

<400> 1211

gaggagggac gagaggctgg tgagatggag tccagcacc cgcaggagag cccagggcc
60

agagccgaag ctgtgcttct ccatgagatg gatgaagatg atctggccaa tgccctgatc
120

tggcctgaga ttcaacagga gctgaaaatc attgaatctg aggaggagct ctcatcgttg
180

ccacctctg ctctgaagac cagcccaatt cagcctattc tcgagtcgag tctggggccc
240

tttattccct cagagcctcc tgggagcttg ccttgtggct ccttccctgc tccagtctcc
300

accctcttg aggtgtggac tagggatcca gccaatcaga gcacacaggg ggcttccaca
360

gcagccagca gagagaagcc ggaacctgag cagggcctgc acccagacct cgccagcctg
420

gctcctctgg aaatagttcc ttttgagaag gcattctccag aggctggagt gtgctcgca
480

<210> 1212

<211> 160

<212> PRT

<213> Homo sapiens

<400> 1212

Glu Glu Gly Arg Glu Ala Gly Glu Met Glu Ser Ser Thr Leu Gln Glu
1 5 10 15

Ser Pro Arg Ala Arg Ala Glu Ala Val Leu Leu His Glu Met Asp Glu
20 25 30

Asp Asp Leu Ala Asn Ala Leu Ile Trp Pro Glu Ile Gln Gln Glu Leu
35 40 45

Lys Ile Ile Glu Ser Glu Glu Glu Leu Ser Ser Leu Pro Pro Pro Ala
50 55 60

Leu Lys Thr Ser Pro Ile Gln Pro Ile Leu Glu Ser Ser Leu Gly Pro
65 70 75 80

Phe Ile Pro Ser Glu Pro Pro Gly Ser Leu Pro Cys Gly Ser Phe Pro
85 90 95

Ala Pro Val Ser Thr Pro Leu Glu Val Trp Thr Arg Asp Pro Ala Asn
100 105 110

Gln Ser Thr Gln Gly Ala Ser Thr Ala Ala Ser Arg Glu Lys Pro Glu
115 120 125

Pro Glu Gln Gly Leu His Pro Asp Leu Ala Ser Leu Ala Pro Leu Glu
130 135 140

Ile Val Pro Phe Glu Lys Ala Ser Pro Glu Ala Gly Val Cys Ser Arg
145 150 155 160

<210> 1213

<211> 1141

<212> DNA

<213> Homo sapiens

<400> 1213

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nntcatgatg gcggcctggt gtgtgggtat gtccacgatg ggcgcgtcac gcgtgtcgcc
60
cgtgatgctc aggggcgggg taccgggata gaggggccat cagggcggtg gagttacggc
120
tacaacgagg ctgggtcact catcagcgcg acggggcccc gcacacaaca taactggact
180
cacgacgcct atggccgggt caccagccac gccacatccg gaaccgacac caccttcggc
240
tgggaccagg aaggccacct ggcgagacg tgtacgctg cacacgggca tgccactgcc
300
accagtatc gctatgacgc agcgggacgg cgcgtcagtg cgaccagctc agacggccag
360
gaggagcggt actcctggga tggacggggg tggctgtctg acatcaccac cgacgccacg
420
accgtatoga ctacgctcga tgcattgggg cgcgccagtc gtatcaccac taaggggccag
480
caggtacgag tggactggga cctcgtgacc ggagcccca cctcgattga tggtcgtcct
540
gtgcttcccc tgcccggagg acgcatcctc ggcgccacac ccatcggcga taccaacct
600
tggcgtgagg tcatgcccac cgaccctgac aacccttacc agcccgccac ggccactatt
660
gagggtgtcc ccgagacgat caggatggcc gggaacacgc tagtggttga tggtcaccct
720
tgggtggggg gcgcctctac gacccaacta ccaccacctt cttgtctcct gaccggttaa
780
ccccgcccc gcgcgcgcta tgggccaaca acccctacga ctacgccaac aacaaccccc
840
tcaccctcac cgatcctctc gggaccacc ccgtcaccga cgaccaactg gcactcctca
900
cccaccccat cggcacactc gcacactacg tcgccaactc cgtcagcaca ctctccggg
960
acatcaccca tccgatcagc cactggtggg ccacccacaa agaccggatc ctctccggg
1020
acttcctgat cggtgccggc ctctgcatcg gcggtatcgc gtagcggcca cgggcgtagg
1080
aggacccctc ctagecggcg ccatttcggg gggactcatc tcaggcggtt ttccgctag
1140
c
1141

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<210> 1214

<211> 259

<212> PRT

<213> Homo sapiens

<400> 1214

```

Xaa His Asp Gly Gly Leu Val Cys Gly Tyr Val His Asp Gly Arg Val
 1           5           10          15
Thr Arg Val Ala Arg Asp Ala Gln Gly Arg Val Thr Gly Ile Glu Gly

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[illegible]

```
<210> 1215
<211> 317
<212> DNA
<213> Homo sapiens
```

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<400> 1215
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60
ggcgtgccga catccggcat cgggggggat cccaacctgc ttacctttta ttggaaccgc
120
ccccggggtc aaccgggcca tcaccgggag aacgccgctc ctcgaggagg gtgttctcgc
180
agtcgccggc gtgggtgcgt ggaagaagta ccgcggcacg accttcggcg ggcgtgctcc
240
gtcgtgtgcc ctgggcctcg tgctcgcgtt catcgtgctg aacaaggctg gctcgcgcga
300
gtacatcgcc tggatcn
317
```

```
<210> 1216
<211> 102
<212> PRT
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<213> Homo sapiens

<400> 1216

```

Met Tyr Cys Gly Glu Pro Thr Leu Phe Ser Thr Met Asn Ala Ser Thr
 1           5           10           15
Arg Pro Arg Asp Ser Asp Gly Ser Ser Pro Pro Lys Val Val Pro Arg
           20           25           30
Tyr Phe Phe His Ala Pro Thr Pro Ala Thr Ala Arg Thr Pro Pro Pro
           35           40           45
Arg Ser Gly Val Leu Pro Val Met Ala Gly Leu Thr Pro Gly Ala Val
           50           55           60
Pro Ile Lys Gly Lys Gln Val Gly Ile Pro Pro Asp Ala Gly Cys Arg
65           70           75           80
His Ala His Val Val His Pro Gln Val Asp Arg Ala His Arg Arg Leu
           85           90           95
Asp Leu Gln Arg Thr Arg
           100

```

<210> 1217

<211> 548

<212> DNA

<213> Homo sapiens

<400> 1217

```

nacgcgtggg ttgacgcgct attaaacgat aagagcaaaa aaacatttcc tcatttatta
60
cgttgtcggg tgaatgatgt ttctggtgat agtcagtgga tagagatgcg aggcagtgtg
120
acagggttggg acagccgtca tcgagctcag atggtgagag ggacattcga gcgtattaac
180
catcttattg acgctgaaaa tgaattaatt gcggcccgtg aagatgctca gcgacgagag
240
cttattttat cggcttttgc aaataatatt ccagaccctg tttggtctaa agatgaaagc
300
ggtcggttatt tggactgtaa ccatgcgttt tgtctgttta atggtttaga gcagagtgat
360
gttcaggggc aaaaagacag tgaattaaac ttagataata atggtcaata ttatcaagat
420
atgggcgggtg aggtatttagc gcgaggggag atttttcatg aacattgttg gggtagcctc
480
gcagatggaa gtgacaaccg cttgtttgaa gtatatcgag tccctatcaa agagcctacc
540
gtgaattc
548

```

<210> 1218

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1218

```

Xaa Ala Trp Val Asp Ala Leu Leu Asn Asp Lys Ser Lys Lys Thr Phe
 1           5           10           15
Pro His Leu Leu Arg Cys Arg Val Asn Asp Val Ser Gly Asp Ser Gln

```



```

      20      25      30
Trp Ile Glu Met Arg Gly Ser Val Thr Gly Trp Asp Ser Arg His Arg
      35      40      45
Ala Gln Met Val Arg Gly Thr Phe Glu Arg Ile Asn His Leu Ile Asp
      50      55      60
Ala Glu Asn Glu Leu Ile Ala Ala Arg Glu Asp Ala Gln Arg Arg Glu
      65      70      75      80
Leu Ile Leu Ser Ala Leu Leu Asn Asn Ile Pro Asp Pro Val Trp Ser
      85      90      95
Lys Asp Glu Ser Gly Arg Tyr Leu Asp Cys Asn His Ala Phe Cys Leu
      100      105      110
Phe Asn Gly Leu Glu Gln Ser Asp Val Gln Gly Gln Lys Asp Ser Glu
      115      120      125
Leu Asn Leu Asp Asn Asn Gly Gln Tyr Tyr Gln Asp Met Gly Gly Glu
      130      135      140
Val Leu Ala Arg Gly Glu Ile Phe His Glu His Cys Trp Gly Thr Pro
      145      150      155      160
Ala Asp Gly Ser Asp Asn Arg Leu Phe Glu Val Tyr Arg Val Pro Ile
      165      170      175
Lys Glu Pro Thr Val Asn
      180

```

<210> 1219

<211> 308

<212> DNA

<213> Homo sapiens

<400> 1219

```

acgcgtgaag ggaggaatac agatggagaa atgggtccac caaaaaatga tgaggggtacc
60
tccagagaaa attaccaaga ccattctgtt agtattttcc agctccacag gcctttggaa
120
gttcccagac caccctccct cttttcaaac taaaacaggg atggctctta accaccaccc
180
aaaggcaagg ggggtcttaa aacccaaacc aagtggggca ggggccagcc tcttcaggag
240
ggcccaaccc tgcagcctct gccatttgg gaaagaccgt gagttggaat tatgggtcgg
300
tggggggc
308

```

<210> 1220

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1220

```

Met Glu Lys Trp Val His Gln Lys Met Met Arg Val Pro Pro Glu Lys
      1      5      10      15
Ile Thr Lys Thr Ile Leu Leu Val Phe Ser Ser Ser Thr Gly Leu Trp
      20      25      30
Lys Phe Pro Asp His Pro Pro Ser Phe Gln Thr Lys Thr Gly Met Ala
      35      40      45
Leu Asn His His Pro Lys Ala Arg Gly Val Leu Lys Pro Lys Pro Ser

```


50	55	60
Gly Ala Gly Ala Ser Leu Phe Arg Arg Ala Gln Pro Cys Ser Leu Cys		
65	70	75
Pro Phe Gly Lys Asp Arg Glu Leu Glu Leu Trp Val Gly Gly Gly		80
85	90	95

<210> 1221
 <211> 569
 <212> DNA
 <213> Homo sapiens

<400> 1221
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 60
 gcccgtccag gaaagctgca cctcagagaa gcagtttcct tccttacctg ggaagtttct
 120
 tctgtaacac gttaagcccc acaggttaagg cctgatcccc cctggacggc tccccctctc
 180
 agtggttccca gtctggaggt antcttttct aagccatcct ctcagaatgt gatgggtacc
 240
 aggatgcaca cccggtggcc ctgtggtgtg aggcctcagc aaacacggtc agaagatgaa
 300
 cacacagaga cccgcccgtc ggaaggagag gagggagcgg atacggaggc ccacgtgcc
 360
 gaaggggtccc ttgcagtggg gtggttatgt gcctgcaatc ccagagtgtc ctcgaaggac
 420
 ctcagatcta acgagctcag ccggcagctg cacgtgggac cagccctctg agcttcactt
 480
 gttttcctct gtgccatcag aaaccaatac gaagataaaa tgggaaaaaa aaaaatccca
 540
 ttcacggcac agcctgccga gaaacgcgt
 569

<210> 1222
 <211> 91
 <212> PRT
 <213> Homo sapiens

Met Asn Thr Gln Arg Pro Ala Arg Arg Lys Glu Arg Arg Glu Arg Ile	
1	5
Arg Arg Pro Thr Cys Gln Lys Gly Pro Leu Gln Trp Cys Gly Tyr Val	
20	25
Pro Ala Ile Pro Glu Cys Pro Arg Arg Thr Ser Asp Leu Thr Ser Ser	
35	40
Ala Gly Ser Cys Thr Trp Asp Gln Pro Ser Glu Leu His Leu Phe Ser	
50	55
Ser Val Pro Ser Glu Thr Asn Thr Lys Ile Lys Trp Glu Lys Lys Lys	
65	70
Ser His Ser Arg His Ser Leu Pro Arg Asn Ala	
85	90

<210> 1223
 <211> 450

<212> DNA

<213> Homo sapiens

<400> 1223

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 60
 ttgtgcgctc accgagaggg gccatacggg gtagacgagt ggtctcagcg catggttact
 120
 gtactttcag atgtgttgcc tgggtgttggc caaggccggt gggttctcgg cgaaactgca
 180
 atagtaacgc ataacctcgc acaattggga gtcaataacg gtgattgcgg ggtcatcggt
 240
 gaaacaaggc ccgtccccac gatagctcta ccgggacccg gtggagtccc cagacgggtg
 300
 ccctgttccc tcatcccatc gctgcaaccc ttacaggcga tgacgattca caaagcgcag
 360
 ggcagccaat tcacggacgt aacggtggtc ctgccaccac ccgactcgcc cctcctctct
 420
 cgtgagttgc tctataccgc catcacgct
 450

<210> 1224

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1224

Lys	Leu	Ala	Gln	Ala	Ser	Ala	Asp	Ala	Ala	Ala	Leu	Lys	Leu	Val	Asp
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Ala	His	Arg	Leu	Leu	Cys	Ala	His	Arg	Glu	Gly	Pro	Tyr	Gly	Val	Asp
		20						25					30		
Glu	Trp	Ser	Gln	Arg	Met	Val	Thr	Val	Leu	Ser	Asp	Val	Leu	Pro	Gly
	35					40						45			
Val	Gly	Gln	Gly	Arg	Trp	Val	Leu	Gly	Glu	Thr	Ala	Ile	Val	Thr	His
	50				55				60						
Asn	Leu	Ala	Gln	Leu	Gly	Val	Asn	Asn	Gly	Asp	Cys	Gly	Val	Ile	Val
65				70					75					80	
Glu	Thr	Arg	Pro	Val	Pro	Thr	Ile	Ala	Leu	Pro	Gly	Pro	Gly	Gly	Val
			85					90					95		
Pro	Arg	Arg	Leu	Pro	Cys	Ser	Leu	Ile	Pro	Ser	Leu	Gln	Pro	Leu	Gln
			100					105					110		
Ala	Met	Thr	Ile	His	Lys	Ala	Gln	Gly	Ser	Gln	Phe	Thr	Asp	Val	Thr
		115					120					125			
Val	Val	Leu	Pro	Pro	Pro	Asp	Ser	Pro	Leu	Leu	Ser	Arg	Glu	Leu	Leu
	130					135					140				
Tyr	Thr	Ala	Ile	Thr	Arg										
145					150										

<210> 1225

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1225

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 tcagtgggag gacaagggtcc tcaattcctg gcacattggc ccagagaagt catgaaaacc
 120
 caaagcccc cgaaagtaag aagtagaaaa aaacccgacc ccgaccagat gaagggacct
 180
 gggaagtgtt tggaaaagag actgctgaag tgtctccttg caggcatcac cgtgagctgg
 240
 ggctttgcac acagcatctt catggctttc cacaatgatc ccagaactga tccagagaaa
 300
 cccagggatc aggggttgac ccgacctgt catcatccca ttctacaaat gaggacactg
 360
 aggcctgggtg aaaagggagg ggtggatgga accaggtggc ctggctctaa gaccagagg
 420
 ctggagtgtg ctcatg
 436

<210> 1226

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1226

Met	Val	Asn	Thr	Gly	Met	Ala	Thr	Trp	Glu	Leu	Lys	Val	Leu	Ser	Val
1				5					10					15	
Gly	Gly	Gln	Gly	Pro	Gln	Phe	Leu	Ala	His	Trp	Pro	Arg	Glu	Val	Met
		20						25					30		
Lys	Thr	Gln	Ser	Pro	Pro	Lys	Val	Arg	Ser	Arg	Lys	Lys	Pro	Asp	Pro
		35					40					45			
Asp	Gln	Met	Lys	Gly	Pro	Gly	Lys	Phe	Leu	Glu	Lys	Arg	Leu	Leu	Lys
	50					55					60				
Cys	Leu	Leu	Ala	Gly	Ile	Thr	Val	Ser	Trp	Gly	Phe	Ala	His	Ser	Ile
65					70					75					80
Phe	Met	Ala	Phe	His	Asn	Asp	Pro	Arg	Thr	Asp	Pro	Glu	Lys	Pro	Arg
				85					90					95	
Asp	Gln	Gly	Leu	Thr	Arg	Pro	Cys	His	His	Pro	Ile	Leu	Gln	Met	Arg
			100					105					110		
Thr	Leu	Arg	Pro	Gly	Glu	Lys	Gly	Gly	Val	Asp	Gly	Thr	Arg	Trp	Pro
		115					120					125			
Gly	Ser	Lys	Thr	Gln	Arg	Leu	Glu	Cys	Ala	His					
	130					135									

<210> 1227

<211> 756

<212> DNA

<213> Homo sapiens

<400> 1227

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 aatggtattg gaataccgat taacaaggta gataaaatct ttgatagatt ctaccgtgtc
 120
 gacaaagcac gtacacgtaa gatgggcggg acaggactag gtctagctat ttccaaagag
 180

attgtcgaag cacataatgg ccgtatttgg gcaaatagtg tcgaaggaca aggtacatct
 240
 atcttcatta ccctaccatg tgaaattatt gaagatgggtg attgggatga atagtaaaga
 300
 atacatcaaa acgattatcc tgatactact tgtattaatg agtatcgtct taacctacat
 360
 ggtatggaac ttctcacctg atctatcaaa tgctgatagt acgtcatcag ataataagaa
 420
 agataattct aaacctattg gaaaaccaat gagtgcgaaa acggataaaa ccatcacacc
 480
 atttcaaatc gttcaatcta atggcgaaaa aacaaaaggt atgccagcaa caggatcatgc
 540
 agtatctcaa attttaagcc cattaaaaga taaaaatgtt gattcagtag aacatttaaa
 600
 acgaaatcat aacttaatta ttctgaatt aagtataac tttatcgttc ttgatttcac
 660
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 720
 taatcatttt aactttaatc gactactgat tgatca
 756

<210> 1228

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1228

Val	Glu	Phe	His	Val	Lys	Gln	Asn	Ala	Leu	Tyr	Asn	Arg	Met	Thr	Ile
1				5					10					15	
Arg	Ile	Lys	Asp	Asn	Gly	Ile	Gly	Ile	Pro	Ile	Asn	Lys	Val	Asp	Lys
			20				25						30		
Ile	Phe	Asp	Arg	Phe	Tyr	Arg	Val	Asp	Lys	Ala	Arg	Thr	Arg	Lys	Met
		35				40					45				
Gly	Gly	Thr	Gly	Leu	Gly	Leu	Ala	Ile	Ser	Lys	Glu	Ile	Val	Glu	Ala
		50				55					60				
His	Asn	Gly	Arg	Ile	Trp	Ala	Asn	Ser	Val	Glu	Gly	Gln	Gly	Thr	Ser
65				70						75				80	
Ile	Phe	Ile	Thr	Leu	Pro	Cys	Glu	Ile	Ile	Glu	Asp	Gly	Asp	Trp	Asp
				85					90					95	

Glu

<210> 1229

<211> 377

<212> DNA

<213> Homo sapiens

<400> 1229

nacgcgtcgt gaacgcggcg tcaacagctt ttcggatata cctctgagga gcccaagatg
 60
 cttgtcggcc ccatggcaaa ccaggggggtc gaggccactg gagcgatggg aaccgacacc
 120
 ccgctggccg tgctatctaa ctgtccgcgg atgctctggg actatttcag tcagcttttc
 180

gctcaggttaa ccaatccgcc cttggacgct atccgcgagg agcttgtcac ctccctgacg
 240
 ggcaccatcg gcccgagggc gaacttgctt gagcctggcc cggaatcatg tcggcaagtg
 300
 gtcgtcaact acccgatcat cgattccgac cagcttgcca agatcattca catcgacgct
 360
 gacggggagc atccgga
 377

<210> 1230
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1230
 Thr Arg Arg Gln Gln Leu Phe Gly Tyr Thr Ser Glu Glu Pro Lys Met
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 Leu Val Ala Pro Met Ala Asn Gln Gly Val Glu Ala Thr Gly Ala Met
 20 25 30
 Gly Thr Asp Thr Pro Leu Ala Val Leu Ser Asn Cys Pro Arg Met Leu
 35 40 45
 Trp Asp Tyr Phe Ser Gln Leu Phe Ala Gln Val Thr Asn Pro Pro Leu
 50 55 60
 Asp Ala Ile Arg Glu Glu Leu Val Thr Ser Leu Thr Gly Thr Ile Gly
 65 70 75 80
 Pro Glu Ala Asn Leu Glu Pro Gly Pro Glu Ser Cys Arg Gln Val
 85 90 95
 Val Val Asn Tyr Pro Ile Ile Asp Ser Asp Gln Leu Ala Lys Ile Ile
 100 105 110
 His Ile Asp Ala Asp Gly Glu His Pro
 115 120

<210> 1231
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1231
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 60
 cggaagtaag gagtttttat ggcggtttta atcaccggag acgccgggta tateggttct
 120
 cacactgttc tggctttggt agaacatggc gaagatgttg tagtggttaga taatttatca
 180
 aactcttccg atgagtctct gcgtcgcgtt gagaaactcg cgggtagaag tgctcagttc
 240
 taccaaggcg atatcttgga tgctgagtgt ctgcatcgca tcttcgaggc tcacgacatc
 300
 tcggctgtga tccattttgc tgggctaaaag ggtgtcggag agtcgacgcg t
 351

<210> 1232
 <211> 91
 <212> PRT

<213> Homo sapiens

<400> 1232

```

Met Ala Val Leu Ile Thr Gly Asp Ala Gly Tyr Ile Gly Ser His Thr
 1           5           10           15
Val Leu Ala Leu Leu Glu His Gly Glu Asp Val Val Val Leu Asp Asn
          20           25           30
Leu Ser Asn Ser Ser Asp Glu Ser Leu Arg Arg Val Glu Lys Leu Ala
          35           40           45
Gly Arg Ser Ala Gln Phe Tyr Gln Gly Asp Ile Leu Asp Ala Glu Cys
          50           55           60
Leu His Arg Ile Phe Glu Ala His Asp Ile Ser Ala Val Ile His Phe
65           70           75           80
Ala Gly Leu Lys Gly Val Gly Glu Ser Thr Arg
          85           90

```

<210> 1233

<211> 4982

<212> DNA

<213> Homo sapiens

<400> 1233

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catttctatt agtggcttcc cgtaaatctc atccttctta gatcaaacct cggtatatct
120
cctgcctatc tcttttgcac tccaaagttc agttttatta aatcccaggg tctaagattt
180
tttctttgag aatttatctc cagtgtttct atggaaatta aaaaagaaaa ttaggataat
240
tcaatgtcga aatgttgcac gcaccttttg agaaatttat atttttagg ttgaaggact
300
tgcttttttg gcagcgtatt tttggagggtg gaatgtagtt attttaataa ccatgtccta
360
attatttata gcttcctgcc tgacacagct cacttcaaga agtgcacaat gtcagaacgt
420
ggaattaagt gggcttgtga atattgtacg tatgaaaact ggccatctgc aatcaagtgt
480
accatgtgtc gtgccccaaag acctagtggg acaattatta cagaagatcc atttaaaagt
540
ggttcaagtg atgttggtag agattgggat ccttcagca ccgaaggagg aagtagtcct
600
ttgatatgtc cagactctag tgcaagacca agggtgaaat ctctgtatag catggaaaat
660
gcaaataagt ggtcatgcca catgtgtaca tatttgaact ggccaagagc aatcagatgt
720
accagtgtc tatcccaacg taggaccagg agtccctacag aatctcctca gtcctcagga
780
tctggctcaa gaccagttgc tttttctgtt gatccttggt aggaatacaa tgatagaaat
840
aaactgaaca ctaggacaca gcactggact tgctctgttt gcacatatga aaactgggcc
900
aaggctaaaa gatgtgttgt ttgtgatcat ccagaccta ataacattga agcaatagaa
960

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ttggcagaga ctgaagaggc ttcttcaata ataaatgagc aagacagagc tcatggagg
1020
ggaagttgca gtagtggttaa tagccaaagg agatcacctc ctgctacgaa gcgggactct
1080
gaagtgaaaa tggattttca gaggattgaa ttggctggtg ctgtgggaag caaggaggaa
1140
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1200
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1920
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2040
tacaagagtt tccggggaga aactttagga tatactcggg ttcaagggtt ttatctgct
2100
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2160
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2340
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2400
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2460
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2520
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2580

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2640
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2760
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2820
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2880
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3660
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3720
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3780
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3840
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3900
tttgcttgct tcttgttttg tttagttgat aatgaaatgt gtacaacctc aaatttgctg
3960
ccagaatact aaaaatagaa aaataccac aaaactgtca tgtcttttagt tctttcccc
4020
cgaaaactca gtaaaaagggt gttcccagga tgaaaagatc attttttgct gcatgctaaa
4080
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4140
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4200

ttttgccaa taagtaatca agtttgtaga aaatgttagc attctgacta cttagcatct
 4260
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 4320
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 4380
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 4440
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 4500
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 4560
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 4620
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 4680
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 4740
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 4800
 gtaagtcata cctgcactct gtggacttga tggttctttt tctagagcaa acagagcgtg
 4860
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 4980
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 4982

<210> 1234

<211> 708

<212> PRT

<213> Homo sapiens

<400> 1234

Met	Ser	Glu	Arg	Gly	Ile	Lys	Trp	Ala	Cys	Glu	Tyr	Cys	Thr	Tyr	Glu
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Asn	Trp	Pro	Ser	Ala	Ile	Lys	Cys	Thr	Met	Cys	Arg	Ala	Gln	Arg	Pro
			20					25					30		
Ser	Gly	Thr	Ile	Ile	Thr	Glu	Asp	Pro	Phe	Lys	Ser	Gly	Ser	Ser	Asp
		35					40					45			
Val	Gly	Arg	Asp	Trp	Asp	Pro	Ser	Ser	Thr	Glu	Gly	Gly	Ser	Ser	Pro
	50					55					60				
Leu	Ile	Cys	Pro	Asp	Ser	Ser	Ala	Arg	Pro	Arg	Val	Lys	Ser	Ser	Tyr
65					70					75					80
Ser	Met	Glu	Asn	Ala	Asn	Lys	Trp	Ser	Cys	His	Met	Cys	Thr	Tyr	Leu
			85						90					95	
Asn	Trp	Pro	Arg	Ala	Ile	Arg	Cys	Thr	Gln	Cys	Leu	Ser	Gln	Arg	Arg
			100						105					110	
Thr	Arg	Ser	Pro	Thr	Glu	Ser	Pro	Gln	Ser	Ser	Gly	Ser	Gly	Ser	Arg
		115					120						125		
Pro	Val	Ala	Phe	Ser	Val	Asp	Pro	Cys	Glu	Glu	Tyr	Asn	Asp	Arg	Asn
	130					135					140				
Lys	Leu	Asn	Thr	Arg	Thr	Gln	His	Trp	Thr	Cys	Ser	Val	Cys	Thr	Tyr

145					150					155				160	
Glu	Asn	Trp	Ala	Lys	Ala	Lys	Arg	Cys	Val	Val	Cys	Asp	His	Pro	Arg
				165					170					175	
Pro	Asn	Asn	Ile	Glu	Ala	Ile	Glu	Leu	Ala	Glu	Thr	Glu	Glu	Ala	Ser
			180					185					190		
Ser	Ile	Ile	Asn	Glu	Gln	Asp	Arg	Ala	Arg	Trp	Arg	Gly	Ser	Cys	Ser
	195						200					205			
Ser	Gly	Asn	Ser	Gln	Arg	Arg	Ser	Pro	Pro	Ala	Thr	Lys	Arg	Asp	Ser
	210					215					220				
Glu	Val	Lys	Met	Asp	Phe	Gln	Arg	Ile	Glu	Leu	Ala	Gly	Ala	Val	Gly
225				230					235					240	
Ser	Lys	Glu	Glu	Leu	Glu	Val	Asp	Phe	Lys	Lys	Leu	Lys	Gln	Ile	Lys
			245					250						255	
Asn	Arg	Met	Lys	Lys	Thr	Asp	Trp	Leu	Phe	Leu	Asn	Ala	Cys	Val	Gly
		260					265					270			
Val	Val	Glu	Gly	Asp	Leu	Ala	Ala	Ile	Glu	Ala	Tyr	Lys	Ser	Ser	Gly
	275					280					285				
Gly	Asp	Ile	Ala	Arg	Gln	Leu	Thr	Ala	Asp	Glu	Val	Arg	Leu	Leu	Asn
	290				295					300					
Arg	Pro	Ser	Ala	Phe	Asp	Val	Gly	Tyr	Thr	Leu	Val	His	Leu	Ala	Ile
305				310					315					320	
Arg	Phe	Gln	Arg	Gln	Asp	Met	Leu	Ala	Ile	Leu	Leu	Thr	Glu	Val	Ser
			325				330						335		
Gln	Gln	Ala	Ala	Lys	Cys	Ile	Pro	Ala	Met	Val	Cys	Pro	Glu	Leu	Thr
		340					345					350			
Glu	Gln	Ile	Arg	Arg	Glu	Ile	Ala	Ala	Ser	Leu	His	Gln	Arg	Lys	Gly
	355					360					365				
Asp	Phe	Ala	Cys	Tyr	Phe	Leu	Thr	Asp	Leu	Val	Thr	Phe	Thr	Leu	Pro
	370				375					380					
Ala	Asp	Ile	Glu	Asp	Leu	Pro	Pro	Thr	Val	Gln	Glu	Lys	Leu	Phe	Asp
385				390					395					400	
Glu	Val	Leu	Asp	Arg	Asp	Val	Gln	Lys	Glu	Leu	Glu	Glu	Glu	Ser	Pro
			405					410						415	
Ile	Ile	Asn	Trp	Ser	Leu	Glu	Leu	Ala	Thr	Arg	Leu	Asp	Ser	Arg	Leu
		420					425					430			
Tyr	Ala	Leu	Trp	Asn	Arg	Thr	Ala	Gly	Asp	Cys	Leu	Leu	Asp	Ser	Val
	435					440					445				
Leu	Gln	Ala	Thr	Trp	Gly	Ile	Tyr	Asp	Lys	Asp	Ser	Val	Leu	Arg	Lys
	450					455				460					
Ala	Leu	His	Asp	Ser	Leu	His	Asp	Cys	Ser	His	Trp	Phe	Tyr	Thr	Arg
465				470					475					480	
Trp	Lys	Asp	Trp	Glu	Ser	Trp	Tyr	Ser	Gln	Ser	Phe	Gly	Leu	His	Phe
			485				490						495		
Ser	Leu	Arg	Glu	Glu	Gln	Trp	Gln	Glu	Asp	Trp	Ala	Phe	Ile	Leu	Ser
		500					505					510			
Leu	Ala	Ser	Gln	Pro	Gly	Ala	Ser	Leu	Glu	Gln	Thr	His	Ile	Phe	Val
	515					520					525				
Leu	Ala	His	Ile	Leu	Arg	Arg	Pro	Ile	Ile	Val	Tyr	Gly	Val	Lys	Tyr
	530				535					540					
Tyr	Lys	Ser	Phe	Arg	Gly	Glu	Thr	Leu	Gly	Tyr	Thr	Arg	Phe	Gln	Gly
545				550					555					560	
Val	Tyr	Leu	Pro	Leu	Leu	Trp	Glu	Gln	Ser	Phe	Cys	Trp	Lys	Ser	Pro
			565				570					575			
Ile	Ala	Leu	Gly	Tyr	Thr	Arg	Gly	His	Phe	Ser	Ala	Leu	Val	Ala	Met


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      580              585              590
Glu Asn Asp Gly Tyr Gly Asn Arg Gly Ala Gly Ala Asn Leu Asn Thr
      595              600              605
Asp Asp Asp Val Thr Ile Thr Phe Leu Pro Leu Val Asp Ser Glu Arg
      610              615              620
Lys Leu Leu His Val His Phe Leu Ser Ala Gln Glu Leu Gly Asn Glu
      625              630              635              640
Glu Gln Gln Glu Lys Leu Leu Arg Glu Trp Leu Asp Cys Cys Val Thr
      645              650              655
Glu Gly Gly Val Leu Val Ala Met Gln Lys Ser Ser Arg Arg Arg Asn
      660              665              670
His Pro Leu Val Thr Gln Met Val Glu Lys Trp Leu Asp Arg Tyr Arg
      675              680              685
Gln Ile Arg Pro Cys Thr Ser Leu Ser Asp Gly Glu Glu Asp Glu Asp
      690              695              700
Asp Glu Asp Glu
705

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<210> 1235
 <211> 383
 <212> DNA
 <213> Homo sapiens

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<400> 1235
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gccttcaccg gtcacaagat gtgcggtccg acgggtatcg gcattctctg gggacgctat
120
gacctcctcg ctgagctacc gcccttcctc ggaggcggcg agatgatcga ggtcgtgcgc
180
atggagggat cgacctacgc cgagcctcca catcgttttg aggcaggcac cccgccgatc
240
gcacagctgg ctgccctcgg ggtggccgcc gactacctag atggcatcgg gatgcaggcc
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360
ggagtgcagc cggagagagg ctg
383

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<210> 1236
 <211> 127
 <212> PRT
 <213> Homo sapiens

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<400> 1236
Ala Ser Gln Ala Val Xaa Gln Ile Pro Val Asp Met Thr Thr Leu Gly
1      5      10      15
Ala Asp Leu Val Ala Phe Thr Gly His Lys Met Cys Gly Pro Thr Gly
20     25     30
Ile Gly Ile Leu Trp Gly Arg Tyr Asp Leu Leu Ala Glu Leu Pro Pro
35     40     45
Phe Leu Gly Gly Gly Glu Met Ile Glu Val Val Arg Met Glu Gly Ser
50     55     60
Thr Tyr Ala Glu Pro Pro His Arg Phe Glu Ala Gly Thr Pro Pro Ile

```


65		70		75		80
Ala	Gln	Leu	Ala	Ala	Leu	Gly
			Val	Ala	Ala	Asp
				Tyr	Leu	Asp
					Gly	Ile
		85		90		95
Gly	Met	Gln	Ala	Ile	Ala	Glu
			His	Glu	His	Glu
				Leu	Ala	Ala
					Arg	Met
		100		105		110
Leu	Glu	Asp	Tyr	Gln	Thr	Val
			Lys	Gly	Val	Gln
				Pro	Glu	Arg
					Gly	
		115		120		125

<210> 1237

<211> 1608

<212> DNA

<213> Homo sapiens

<400> 1237

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acaccagcac attctgactc aacatggcta tacggttgtc atcgctgaag aaaggctcaa
120
tgctggccta gggccggggc tactagaaca aggtgatctg ggctcttggg atctgctcat
180
ttgcctgtct tctaagaaag cagaaggaac accctgtata tccaaggaag tcatgtgcca
240
gttaggttta catcaaaagg caaacagatt accagaaata cagcagccac tttgcagaaa
300
ggaaggatta tgtcaaatag ttagaagatt ccagaaactg caacttccag tgagtccttc
360
tgtgtgtctg gatcagggaa tgcaattaaa gccgagtact tcgagtcacc ttttaaaaac
420
agtgaagcca cgtgtgtgga aaccagggga ctggagtcgt gaacagctga atgaaacgac
480
agtccttgct ccacatgaaa caatctttcg agccaaagat ctatctgtga ttcttaaagc
540
gtatgtgttg gtgacgtcct taaccctttt gcgtgcattc attcattcga ctggcacagt
600
ttggaatcca ccaaagaaaa aacgcttcac tgtcaagctg caaacatttt ttgagacatt
660
cctgagagcc agttcacctc aacaggcttt tgacattatg aaggaagcaa ttggcaaact
720
actgctagcc gctgaagtat tcagtgaaac atctactctg ggaccaaaga ccttccatag
780
atgcagattc tgctttcaac ttctaacttt tgatattggg tatggcagtt tcatgtaccc
840
tgtagtgtct caggtacacg agcattttaa ttttcaagat tatgataata tggattttga
900
ggaccaaagt acagaagaat tcctttttaa tgacactttc aattttctct tcctaatga
960
atcatcaact tccatatttt ctgagatatt tcagagactt tatagatcag atgttttcaa
1020
gggtgaaaac tatcaaaagg aactaaatca gtgtctgtcc ttagaagaaa ttaactcaat
1080
tatgactttc ataaaggaac ttggaagtct gggacaattc caactgctct tccatctac
1140
tactcctggg attcagtcac tgatgcatga attttatgat gtggcaaact ctgtgggaaa
1200

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tcctggctca gtcctgaccc aatactggtc tcttttaaat gtatttgaac aatttcagtt
 1260
 catgaataaa aagacacagc cacatccact ggaatggaat tctttcacag aagataagaa
 1320
 cattgaaaaa ccacaagtgc catttgatgc aatagaaaaat aaaaaagctg cagttccaca
 1380
 aattaaaaat gaaaataaag aaatacattg cagtgatgat gaaaacacac catgtcatat
 1440
 caagcagatc ttcacacatc cacatttgga actaaatcct gactttcatc caaagatcaa
 1500
 agattattac tgtgaagtcc catttgatgt ggtaacagtg acaattggag tggaaactcc
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<210> 1238

<211> 458

<212> PRT

<213> Homo sapiens

<400> 1238

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Gln	Gln	Pro	Leu	Cys	Arg	Lys	Glu	Gly	Leu	Cys	Gln	Ile	Val	Arg	Arg
			20					25					30		
Phe	Pro	Glu	Leu	Gln	Leu	Pro	Val	Ser	Pro	Ser	Val	Cys	Leu	Asp	Gln
			35				40					45			
Gly	Met	Gln	Leu	Lys	Pro	Ser	Thr	Ser	Ser	His	Leu	Leu	Lys	Thr	Val
	50					55					60				
Lys	Pro	Arg	Val	Trp	Lys	Pro	Gly	Asp	Trp	Ser	Arg	Glu	Gln	Leu	Asn
65					70				75					80	
Glu	Thr	Thr	Val	Leu	Ala	Pro	His	Glu	Thr	Ile	Phe	Arg	Ala	Lys	Asp
			85					90						95	
Leu	Ser	Val	Ile	Leu	Lys	Ala	Tyr	Val	Leu	Val	Thr	Ser	Leu	Thr	Pro
		100					105						110		
Leu	Arg	Ala	Phe	Ile	His	Ser	Thr	Gly	Thr	Val	Trp	Asn	Pro	Pro	Lys
		115				120					125				
Lys	Lys	Arg	Phe	Thr	Val	Lys	Leu	Gln	Thr	Phe	Phe	Glu	Thr	Phe	Leu
	130					135				140					
Arg	Ala	Ser	Ser	Pro	Gln	Gln	Ala	Phe	Asp	Ile	Met	Lys	Glu	Ala	Ile
145					150				155						160
Gly	Lys	Leu	Leu	Leu	Ala	Ala	Glu	Val	Phe	Ser	Glu	Thr	Ser	Thr	Leu
			165					170						175	
Gly	Pro	Lys	Thr	Phe	His	Arg	Cys	Arg	Phe	Cys	Phe	Gln	Leu	Leu	Thr
			180					185					190		
Phe	Asp	Ile	Gly	Tyr	Gly	Ser	Phe	Met	Tyr	Pro	Val	Val	Leu	Gln	Val
	195						200					205			
His	Glu	His	Leu	Asn	Phe	Gln	Asp	Tyr	Asp	Asn	Met	Asp	Phe	Glu	Asp
	210					215					220				
Gln	Asn	Thr	Glu	Glu	Phe	Leu	Leu	Asn	Asp	Thr	Phe	Asn	Phe	Leu	Phe
225					230					235				240	
Pro	Asn	Glu	Ser	Ser	Leu	Ser	Ile	Phe	Ser	Glu	Ile	Phe	Gln	Arg	Leu
			245					250					255		
Tyr	Arg	Ser	Asp	Val	Phe	Lys	Gly	Glu	Asn	Tyr	Gln	Lys	Glu	Leu	Asn

	260		265		270
Gln Cys Leu	Ser Leu Glu Glu Ile	Asn Ser Ile Met Thr Phe Ile Lys			
275	280	285			
Glu Leu Gly Ser Leu Gly Gln Phe Gln Leu Leu Phe Pro Ser Thr Thr					
290	295	300			
Pro Gly Ile Gln Ser Leu Met His Glu Phe Tyr Asp Val Ala Asn Pro					
305	310	315	320		
Val Gly Asn Pro Gly Ser Val Leu Thr Gln Tyr Trp Ser Leu Leu Asn					
325	330	335			
Val Phe Glu Gln Phe Gln Phe Met Asn Lys Lys Thr Gln Pro His Pro					
340	345	350			
Leu Glu Trp Asn Ser Phe Thr Glu Asp Lys Asn Ile Glu Lys Pro Gln					
355	360	365			
Val Pro Phe Asp Ala Ile Glu Asn Lys Lys Ala Ala Val Pro Gln Ile					
370	375	380			
Lys Asn Glu Asn Lys Glu Ile His Cys Ser Asp Asp Glu Asn Thr Pro					
385	390	395	400		
Cys His Ile Lys Gln Ile Phe Thr His Pro His Leu Glu Leu Asn Pro					
405	410	415			
Asp Phe His Pro Lys Ile Lys Asp Tyr Tyr Cys Glu Val Pro Phe Asp					
420	425	430			
Val Val Thr Val Thr Ile Gly Val Glu Thr Pro Lys Cys Leu Cys Lys					
435	440	445			
Val His Leu Tyr Glu Gln Ala Gly Pro Ser					
450	455				

<210> 1239

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1239

atacctactg aacgtgaacg aacagaaagg ctaattaaaa ccaaattaag ggagatcatg
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atgcagaagg atttgagaa tattacatcc aaagagataa gaacagagtt ggaaatgcaa
120

atggtgtgca acttgcggga attcaaggaa tttatagaca atgaaatgat agtgatcctt
180

ggtcaaattg atagccctac acagatattt gagcatgtgt tcctgggctc agaatggaat
240

gcctccaact tagaggactt acagaaccga ggggtacggt atatcttgaa tgtcactcga
300

gagatagata actttttccc aggagtcttt gagtatcata acattcgggt atatgatgaa
360

gaggcaacgg atctcctggc gtactggaat gacacttaca aattcatctc taaagcaaag
420

aaacatggat ctaaatgcct tgtgcac

447

<210> 1240

<211> 149

<212> PRT

<213> Homo sapiens

WO 00/58473

<400> 1240
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 1 5 10 15
 Arg Glu Ile Met Met Gln Lys Asp Leu Glu Asn Ile Thr Ser Lys Glu
 20 25 30
 Ile Arg Thr Glu Leu Glu Met Gln Met Val Cys Asn Leu Arg Glu Phe
 35 40 45
 Lys Glu Phe Ile Asp Asn Glu Met Ile Val Ile Leu Gly Gln Met Asp
 50 55 60
 Ser Pro Thr Gln Ile Phe Glu His Val Phe Leu Gly Ser Glu Trp Asn
 65 70 75 80
 Ala Ser Asn Leu Glu Asp Leu Gln Asn Arg Gly Val Arg Tyr Ile Leu
 85 90 95
 Asn Val Thr Arg Glu Ile Asp Asn Phe Pro Gly Val Phe Glu Tyr
 100 105 110
 His Asn Ile Arg Val Tyr Asp Glu Ala Thr Asp Leu Leu Ala Tyr
 115 120 125
 Trp Asn Asp Thr Tyr Lys Phe Ile Ser Lys Ala Lys Lys His Gly Ser
 130 135 140
 Lys Cys Leu Val His
 145

<210> 1241
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 1241
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 aactaggcag acagaccgac agataggggg aaaccgggat gtttaatgtg tccgaacaag
 120
 taggaagatc aatgaggcgc gagtgtgtgt gtgtacgtgt gcgcgtgtgt gtgtgagaga
 180
 gagagaaaga aagaagaaag gtcccgattg caacgtgtca gatcttgcaa cttcccccc
 240
 acccaacaca acaaccctca gacacaaaaa caccattgct gactgatacc ccaggtcttc
 300
 aggggttaaag gaaccgtgtg ttggcagcgc aattgtgcag acgctgtaag gccaaaacga
 360
 ggatttgtgt tgtgaggtcg gtggtgcgtt cttttctttc tcttctcgcc tgttttcccg
 420
 gagtgcctgg gttgcgagaa aggcgcacgc caggctgtgc agccgaatcg cttcgcaatt
 480
 attcatgct
 489

<210> 1242
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 1242
 Met Asn Asn Cys Glu Ala Ile Arg Leu His Ser Leu Arg Cys Ala Phe

1	5	10	15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Arg Glu Glu Lys Glu Lys			
20	25	30	
Asn Ala Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser			
35	40	45	
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp			
50	55	60	
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val			
65	70	75	80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro			
85	90	95	
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His			
100	105	110	
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His			
115	120	125	

<210> 1243

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1243

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gagatgatat acctaccggg aatgttcact gtctacttcg atggccagtt ctgggtcgga
120
gtcctagaga ggcgcgacga gggtttggtg cgtgccgtaa aagtcacgtt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtgggtt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgtgtctgt cctaccacc cgcagtcacc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccaagcac accgtgccag cacgnccgca
360
caggccgcga ttaaggccga tcaggaagct
390

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<210> 1244

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1244

Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro			
1	5	10	15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr			
20	25	30	
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly			
35	40	45	
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr			
50	55	60	
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg			
65	70	75	80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys			

	85		90		95										
Arg	Leu	Asn	Pro	Lys	Arg	Ala	Leu	Arg	Asp	Ala	Ala	Arg	Ala	Ala	Gln
	100				105				110						
Ala	His	Arg	Ala	Ser	Thr	Xaa	Ala	Gln	Ala	Ala	Ile	Lys	Ala	Asp	Gln
	115				120				125						
Glu	Ala														
	130														

<210> 1245
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1245
 gccaaagcagc aaaaaccaca gatcattgct atgggaaatg tgtcattttc ttgttcacaa
 60
 ccacaatcta tgcccgtgac ttttctgagc tccaggagtt ttttagcact gccagacttc
 120
 tctggagagg aggagggttc tgccactttt caatttcgaa cttggaataa ggcagggctt
 180
 ctgctgttca gtgaacttca gctgatttca gggggatatcc tcctctttct gagtgatgga
 240
 aaacttaagt cgaatcteta ccagccaaga aaattaccca gtgacatcac agcaggtgtc
 300
 gaattaaatg atgggcagtg gcattctgtc tctttatct
 339

<210> 1246
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1246
 Ala Lys Gln Gln Lys Pro Gln Ile Ile Ala Met Gly Asn Val Ser Phe
 1 5 10 15
 Ser Cys Ser Gln Pro Gln Ser Met Pro Val Thr Phe Leu Ser Ser Arg
 20 25 30
 Ser Phe Leu Ala Leu Pro Asp Phe Ser Gly Glu Glu Val Ser Ala
 35 40 45
 Thr Phe Gln Phe Arg Thr Trp Asn Lys Ala Gly Leu Leu Leu Phe Ser
 50 55 60
 Glu Leu Gln Leu Ile Ser Gly Gly Ile Leu Leu Phe Leu Ser Asp Gly
 65 70 75 80
 Lys Leu Lys Ser Asn Leu Tyr Gln Pro Arg Lys Leu Pro Ser Asp Ile
 85 90 95
 Thr Ala Gly Val Glu Leu Asn Asp Gly Gln Trp His Ser Val Ser Leu
 100 105 110
 Ser

<210> 1247
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 1247

ttgacctcca acccgggcac ggcgcatcctg cccagatcc cgatggatgg gcatgacctc
 60
 aaccgggtgt ggcggggacgt cggcctgata gtgcacccgc cgatgctcta catgggctac
 120
 gtcggtttct ccgtggcctt tgcgtttgcc atcgccgcct tgctcggcgg gcgcctcgat
 180
 gcggcctggg cgcgctggtc ggggccatgg accattgtgg cctgggcgtt cctcggtatc
 240
 ggtatcacc tcggttcgtg gtgggcctac tacgaactcg gctggngcgg ctggtggttc
 300
 tgggaccccg gggaaaaccc cttcttcata ccctggctgg ggggcacccc gctgattcac
 360
 tcgctg
 366

<210> 1248

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1248

Leu	Thr	Ser	Asn	Pro	Gly	Thr	Arg	Ile	Leu	Pro	Gln	Ile	Pro	Met	Asp
1				5					10					15	
Gly	His	Asp	Leu	Asn	Pro	Val	Trp	Arg	Asp	Val	Gly	Leu	Ile	Val	His
			20					25					30		
Pro	Pro	Met	Leu	Tyr	Met	Gly	Tyr	Val	Gly	Phe	Ser	Val	Ala	Phe	Ala
			35				40					45			
Phe	Ala	Ile	Ala	Ala	Leu	Leu	Gly	Gly	Arg	Leu	Asp	Ala	Ala	Trp	Ala
	50					55				60					
Arg	Trp	Ser	Arg	Pro	Trp	Thr	Ile	Val	Ala	Trp	Ala	Phe	Leu	Gly	Ile
65				70						75				80	
Gly	Ile	Thr	Leu	Gly	Ser	Trp	Trp	Ala	Tyr	Tyr	Glu	Leu	Gly	Trp	Xaa
			85					90						95	
Gly	Trp	Trp	Phe	Trp	Asp	Pro	Gly	Glu	Asn	Pro	Phe	Phe	Met	Pro	Trp
			100					105					110		
Leu	Gly	Gly	Thr	Pro	Leu	Ile	His	Ser	Leu						
			115				120								

<210> 1249

<211> 374

<212> DNA

<213> Homo sapiens

<400> 1249

acgctgtgcc tcaacaccct ggcgcccacg ctgattgccg tggaaccggg gccggcaatg
 60
 ggcgcgagct tgagcaagct gctgccggat gtgcacctgg tcaatggcac tgccgaggcc
 120
 attccactgg aaagcgccgt ggcggatgag gtggtgtgag cacaagcctt ccattgggtt
 180
 tccagcgagg cggccctggc ggaaatccat cgggtactca aaccggatgg gcgcctgggg
 240

ctgggtgtgga atgtgcgcga cgagtcggtg gattgggtcg ccgccattac tcaaatcatc
 300
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgcca agccttcact
 360
 ggcgagtatt ttg
 374

<210> 1250

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1250

Thr	Arg	Val	Leu	Asn	Thr	Leu	Ala	Pro	Thr	Leu	Ile	Ala	Val	Glu	Pro
1				5				10					15		
Val	Pro	Ala	Met	Gly	Ala	Gln	Leu	Ser	Lys	Leu	Leu	Pro	Asp	Val	His
			20					25				30			
Leu	Val	Asn	Gly	Thr	Ala	Glu	Ala	Ile	Pro	Leu	Glu	Ser	Ala	Val	Ala
		35					40					45			
Asp	Ala	Val	Val	Cys	Ala	Gln	Ala	Phe	His	Trp	Phe	Ser	Ser	Glu	Ala
	50					55				60					
Ala	Leu	Ala	Glu	Ile	His	Arg	Val	Leu	Lys	Pro	Asp	Gly	Arg	Leu	Gly
65					70				75					80	
Leu	Val	Trp	Asn	Val	Arg	Asp	Glu	Ser	Val	Asp	Trp	Val	Ala	Ala	Ile
			85					90					95		
Thr	Gln	Ile	Ile	Thr	Pro	Tyr	Glu	Gly	Asp	Thr	Pro	Arg	Phe	His	Thr
			100					105					110		
Gly	Arg	Trp	Arg	Glu	Ala	Phe	Thr	Gly	Glu	Tyr	Phe				
		115					120								

<210> 1251

<211> 742

<212> DNA

<213> Homo sapiens

<400> 1251

accggtctct tcctcggaaa ggcagggccg aggggcttgc ggggcagcca tggaggcgac
 60
 gcggaggcgg cagcacgtgg gagcgacggg cggcccaggc gcgcagtgg gcgcctcctt
 120
 cctgcaggc caggcatggc tctgtgagcg ctgatgaggc tgcccgcacg gctcccttcc
 180
 acctcgacct ctggttctac ttcacactgc agaactgggt tctggacttt gggcgctcca
 240
 ttgccatgct ggtattccct ctcgagtggg ttccactcaa caagcccagt gttggggact
 300
 atttccacat ggcctacaac gtcatcacgc cttttctctt gctcaagctc atcgagcggg
 360
 cccccgcac cctgctacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg
 420
 ccagcatcca cctgggtggg gactctgtca accaccgct gctcttcagt ggctaccagc
 480
 accacctgtc tgtccgtgag aaccccatca tcaagaatct caagccggag acgctgatcg
 540

actcctttga gctgctctac tattatgatg agtacctggg tcaactgcatg tggtagatcc
 600
 ccttcttccct cactctcttc atgtacttca gcggtctgctn ttactgcctc taaagctgag
 660
 agcttgattc cagggcctgc cctgctcctg gtggcaccga gtggcctgta ctactggtac
 720
 ctggtcaccg agggccagat ct
 742

<210> 1252
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 1252
 Met Arg Leu Pro Ala Arg Leu Pro Ser Thr Ser Thr Ser Gly Ser Thr
 1 5 10 15
 Ser His Cys Arg Thr Gly Phe Trp Thr Leu Gly Val Pro Leu Pro Cys
 20 25 30
 Trp Tyr Ser Leu Ser Ser Gly Phe His Ser Thr Ser Pro Val Leu Gly
 35 40 45
 Thr Thr Ser Thr Trp Pro Thr Thr Ser Ser Arg Pro Phe Ser Cys Ser
 50 55 60
 Ser Ser Ser Ser Gly Pro Pro Ala Pro Cys Tyr Ala Pro Ser Arg Thr
 65 70 75 80

<210> 1253
 <211> 675
 <212> DNA
 <213> Homo sapiens

<400> 1253
 gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag tttccagaga
 60
 gcgaggagct tttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc
 120
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc
 180
 atgtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattgaa
 240
 acagtcgtgg ttcagtttcc aagtcttccc gcaatatccc aaggagacac accctagggg
 300
 ggccccgaag ttccaaggaa atactgggaa tgcaaacatc tgagatggat cggaagagag
 360
 gaaaaagcgt tcctagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg
 420
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtctctaa
 480
 ccacccagtg tgggtgaccc ggtcgagcat ttatcagaga cgtccgctga ttctttggaa
 540
 gccatgtctg agggggatgc tccaaccctt ttttccagag gcagccggac tcgtgagcagc
 600
 cttcctgtgg tgaggtaaac caaccagacg aaagaaagat ctctgggggt tctctatctc
 660

cagtatggag atgaa
675

<210> 1254

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1254

Met	Gly	His	Gln	Glu	Arg	Leu	Arg	Asp	Gln	Thr	Arg	Ile	Pro	Lys	Leu
1				5					10					15	
Ser	His	Ser	Pro	Gln	Pro	Pro	Ser	Val	Gly	Asp	Pro	Val	Glu	His	Leu
			20					25					30		
Ser	Glu	Thr	Ser	Ala	Asp	Ser	Leu	Glu	Ala	Met	Ser	Glu	Gly	Asp	Ala
		35					40					45			
Pro	Thr	Pro	Phe	Ser	Arg	Gly	Ser	Arg	Thr	Arg	Ala	Ser	Leu	Pro	Val
	50					55				60					
Val	Arg	Ser	Thr	Asn	Gln	Thr	Lys	Glu	Arg	Ser	Leu	Gly	Val	Leu	Tyr
65				70					75					80	
Leu	Gln	Tyr	Gly	Asp	Glu										
				85											

<210> 1255

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1255

ncgccgatta ccaaggctat ggatgtgtgg gccttgggcg taacgctata ctgtctgctg
60
ttcgggtcgag tgccatttga tgcagagacg gagtacttgc tgctggaaag tatectgcat
120
gacgattatg ccgtcccgac gcacatgggt agcgaccgcg tgttggtagg cccgcgacca
180
gcacgttggc cctcgtcgca agagacgccc aacgtgccgc tgtccggcga ggcgcgatgca
240
gtacgccatc tgctcgatgc ccttctcgac aaggatccag cgacgcgcct cactctcgat
300
cgtgttataa cacacccatg gctcgtggca gagtcattgg aatagtagca attgtatata
360
ccctcatcac caagatggcc aaagcggtag aaggcccgcg g
401

<210> 1256

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1256

Xaa	Pro	Ile	Thr	Lys	Ala	Met	Asp	Val	Trp	Ala	Leu	Gly	Val	Thr	Leu
1				5					10					15	
Tyr	Cys	Leu	Leu	Phe	Gly	Arg	Val	Pro	Phe	Asp	Ala	Glu	Thr	Glu	Tyr
			20					25				30			
Leu	Leu	Leu	Glu	Ser	Ile	Leu	His	Asp	Asp	Tyr	Ala	Val	Pro	Thr	His


```

      35              40              45
Met Gly Ser Asp Arg Val Leu Val Gly Pro Arg Pro Ala Arg Trp Pro
  50              55              60
Ser Ser Gln Glu Thr Pro Asn Val Pro Leu Ser Gly Glu Ala His Ala
  65              70              75              80
Val Arg His Leu Leu Asp Ala Leu Leu Asp Lys Asp Pro Ala Thr Arg
      85              90              95
Leu Thr Leu Asp Arg Val Ile Thr His Pro Trp Leu Val Ala Glu Ser
      100              105              110
Trp

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<210> 1257

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1257

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cgcggtacagc tgattgaagg tgatgtcgcc aacgccgacc tggaggcgca agccgccatc
  60
ggcgccacgg cggtggtgca tttggcagcg gtggcttcgg tgcaagcctc ggtggatgac
  120
ccggtcagca cgcgccagag caattttgtc ggcaccttga atgtctgcga agccatgcgc
  180
aaggccggtg tgaagcgtgt ggtatttgc tccagcgttg cggtgtatgg caacaatggc
  240
gagggcgctt cgattgacga agagaccatc aaggccccgc tgacgcctta cgcg
  294

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<210> 1258

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1258

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Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala
  1              5              10              15
Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala
      20              25              30
Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn
      35              40              45
Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val
      50              55              60
Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly
  65              70              75              80
Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro
      85              90              95
Tyr Ala

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<210> 1259

<211> 417

<212> DNA

<213> Homo sapiens

<400> 1259
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 60
 atccccgtctc ccttcgtctg gagcagacat agtgagaacg tgagaagctg caggcgtggc
 120
 ctcaccgtgg tgtgttccaa gatgtccagg gccaaaggatg ccgtgtcctc cggggtggcc
 180
 agcgtggtgg acgtggctaa gggagtggc cagggaggcc tggacaccac tcggtctgca
 240
 cttacgggca ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catggctaag
 300
 ggggccgtcc aaggggggtct ggacacctcg aaggctgtcc tcaccggcac caaggacacg
 360
 gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgtaca ggccggc
 417

<210> 1260
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1260
 Leu Lys Glu Ala Ala Gln Gly Leu Ala Leu Arg Phe Gly Gly Ile Pro
 1 5 10 15
 Ser Pro Phe Val Trp Ser Arg His Ser Glu Asn Val Arg Ser Cys Arg
 20 25 30
 Arg Gly Leu Thr Val Val Cys Ser Lys Met Ser Arg Ala Lys Asp Ala
 35 40 45
 Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala Lys Gly Val Val
 50 55 60
 Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr Gly Thr Lys Glu
 65 70 75 80
 Ala Val Ser Ser Gly Val Thr Gly Ala Met Asp Met Ala Lys Gly Ala
 85 90 95
 Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr Lys
 100 105 110
 Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly
 115 120 125
 Pro Val Gln Ala Gly
 130

<210> 1261
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1261
 ngtgcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgctga agtcgatcag
 60
 ctggtccgcc aatcccagac ctggatcccc ttgatcatgg agtacggcag ccgcctgctg
 120tgaccctggc ggtcggctgg tggatcgaca acaaggtcag cgcccgctg 180
 ggcaaaactgg taggcctgcg caacgccgac ctggcactgc aaggctttat cagcaccttg
 240

tcgaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag
 300
 accacctegt tcgtcgcgga catcggtgct
 330

<210> 1262
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1262
 Xaa Ala Arg Ala Val Arg His Gln Glu Met Asn Met Asp Leu Asn Ala
 1 5 10 15
 Glu Val Asp Gln Leu Val Arg Gln Ser Gln Thr Trp Ile Pro Leu Ile
 20 25 30
 Met Glu Tyr Gly Ser Arg Leu Leu Leu Ala Leu Leu Thr Leu Ala Val
 35 40 45
 Gly Trp Trp Ile Asp Asn Lys Val Ser Ala Arg Leu Gly Lys Leu Val
 50 55 60
 Gly Leu Arg Asn Ala Asp Leu Ala Leu Gln Gly Phe Ile Ser Thr Leu
 65 70 75 80
 Ser Asn Ile Gly Leu Lys Val Leu Leu Phe Val Ser Val Ala Ser Met
 85 90 95
 Ile Gly Ile Glu Thr Thr Ser Phe Val Ala Asp Ile Gly Ala
 100 105 110

<210> 1263
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1263
 acgcgtggac gatggacttc gtcggtctgc ggtacgacga agggctcaac attgccggtg
 60
 gcatcgatga tgagtttgct cgcctgggca acacctagca gcaatggcat cgatagtccc
 120
 tgcccagcct gctccatttc gacgacgatg gtcgccgggt tcagtttctt ctcgctccac
 180
 gtcaacagac cgtcaccgtg gttgacgata tcgccggtgg aggcgtcctt gacgacgac
 240
 tggccacgcy ccaggaata catctcccca tccacccaaa agaacgcccc caagctgggc
 300
 atcttgacca gcccgatgat cgagaggggt tcaacaagcg actcgggatc c
 351

<210> 1264
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1264
 Met Pro Ser Leu Gly Ala Phe Phe Trp Val Asp Gly Glu Met Tyr Ser
 1 5 10 15
 Leu Ala Arg Gly Gln Ile Val Val Lys Asp Ala Ser Thr Gly Glu Ile

[illegible]

<210> 1265

<211> 318

<212> DNA

<213> Homo sapiens

<400> 1265

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accggtgtat gcaactgaaa tgctgtccga tatgctcgcg ctccagctcg tgaatcgaaa
60
gttgataaac gctcgcttgg tggaatcgtc gctacggaag cttatcaagg atacggatgc
120
tgctgcaccg ccaaaattat ggacgcccc cgacccact cgctctgacg ataccattgc
180
acagccgaaa gtgcaaccag cccaagcagt gggagatgac tcgatcatgt cggtcgatga
240
gcttgatgca accgtccatg acatgccact caccacgaca ctcgacaacg tgggtcgctc
300
agatccatcg cgacgcgt
318

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<210> 1266

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1266

[illegible]

<210> 1267

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1267

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 60
 ggaactgtcc caccgcccgt gtttctgtgc gcctgcagac actcgtggga aatgccccac
 120
 aacctgtggt tttgttcccc ttgtgaacac tcgtgggaaa tgccccacaa cctgtgtttt
 180
 tattccccct gtgaacactc gtgggaaatg tcccatggcc cgtgtttccg tgcacctgcg
 240
 gatactcatc aaacaccagg ctgtcattgg ggacaggggtg agctctggct gttgggtgcag
 300
 catggtagga agagcaccaa gtcctggact ctgttgattt ata
 343

<210> 1268

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1268

Met	Pro	His	Ser	Leu	Cys	Phe	Tyr	Ser	Pro	Cys	Glu	His	Leu	Trp	Glu
1				5					10					15	
Leu	Ser	His	Gly	Pro	Cys	Phe	Cys	Ala	Pro	Ala	Asp	Thr	Arg	Gly	Lys
			20					25					30		
Cys	Pro	Thr	Thr	Cys	Val	Phe	Val	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
		35					40					45			
Cys	Pro	Thr	Thr	Cys	Val	Phe	Ile	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
	50					55					60				
Cys	Pro	Met	Ala	Arg	Val	Ser	Val	His	Leu	Arg	Ile	Leu	Ile	Lys	His
65					70					75				80	
Gln	Ala	Val	Ile	Gly	Asp	Arg	Val	Ser	Ser	Gly	Cys	Trp	Cys	Ser	Met
			85					90						95	
Val	Gly	Arg	Ala	Pro	Ser	Pro	Gly	Leu	Cys						
			100					105							

<210> 1269

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1269

tcgcgatccg gagcgatcgg tgctgcagat ggctggcgac gccctgcggg gcgcattgcg
 60
 ggacgccgac ctggagccgg ccgccctaga cgggctgata gtccaggtgg ggtccccccg
 120
 cggcgccgac tacgacaccg tgtccgaaac ctttgggtctt tcgccacaat tctgcagcca
 180
 gacctggggc gcacggccgg ttcaccgcaa cgggtgatac ggcagcggcc atggcggtgt
 240
 ccagcggcct cgcgcggcgg gtggcttgcc tcatgggcat gaagaattcg gacctcgggc
 300

ggttgggtga ggcggacaat ccctttcatc atgagcaatt ccgggagaat ggcgggccgc
 360
 acggggaaga gggttggatc ggcattgcct c
 391

<210> 1270

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1270

Met	Met	Lys	Gly	Ile	Val	Arg	Leu	Thr	Gln	Pro	Pro	Glu	Val	Arg	Ile
1				5					10					15	
Leu	His	Ala	His	Glu	Ala	Ser	His	Pro	Pro	Arg	Glu	Ala	Ala	Gly	His
		20						25					30		
Arg	His	Gly	Arg	Cys	Gln	Asp	His	Arg	Cys	Gly	Glu	Pro	Ala	Val	Arg
		35					40					45			
Pro	Arg	Ser	Gly	Cys	Arg	Ile	Val	Ala	Lys	Asp	Gln	Arg	Phe	Arg	Thr
	50					55					60				
Arg	Cys	Arg	Ser	Pro	Arg	Arg	Gly	Gly	Thr	Pro	Pro	Gly	Arg	Ser	Ala
65					70					75				80	
Arg	Leu	Gly	Arg	Pro	Ala	Pro	Gly	Arg	Arg	Pro	Ala	Met	Arg	Pro	Ala
				85					90					95	
Gly	Arg	Arg	Gln	Pro	Ser	Ala	Ala	Pro	Ile	Ala	Pro	Asp	Arg		
			100					105					110		

<210> 1271

<211> 661

<212> DNA

<213> Homo sapiens

<400> 1271

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 60
 accagaaagc gtcattcgagg tggatgaacga gaacggggcga tggatgtggg ggacgggataa
 120
 cccccgggtt cgtaaccata tggcccaact aagagttcac cagggttgat ttaccagccc
 180
 cggtcgaccc tctaccacc gccagaagcg gcgcatcaat agtctctaag cgcggcaaaa
 240
 tatagtcggtt aagctgggta gcatgagcgc gtgcccagccc ggcttgagta atagcctccg
 300
 gcaaatccaa ggggaactgg gcctgacgca ggttggtgcc cagatcggtc aacgacagca
 360
 gtatctgctc agtggttcag gtgacccctc ctgggtcactc gtcaggcctg tggcgggcgc
 420
 cactgcaact cgttggtgac cggctgggtg cgacgtcgct tgaggaatgc gggcagtcctc
 480
 ggcttcgaca atttggcacc tcggggcgac gtgatagccg ccggggcgag cacgttcata
 540
 cggttgatga gtcgatctg aagcggacca ggatcatcgt ccaaccacg cacaatggcg
 600
 tcacgaagat aagcaagatc tgtcccaacg cgcaggaact ctaacgtgtg ccaccaccg
 660

t

661

<210> 1272

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1272

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Met Asn Thr Glu Gln Ile Leu Leu Ser Leu Thr Asp Leu Arg His Asn
 1           5           10           15
Leu Arg Gln Ala Gln Phe Pro Leu Asp Leu Pro Glu Ala Ile Thr Gln
      20           25           30
Ala Gly Leu Ala Arg Arg Ile Ala Asn Gln Leu Asn Asp Tyr Ile Leu
      35           40           45
Pro Arg Leu Glu Thr Ile Asp Ala Pro Leu Leu Ala Val Val Gly Gly
      50           55           60
Ser Thr Gly Ala Gly Lys Ser Thr Leu Val Asn Ser Leu Val Gly His
      65           70           75           80
Met Val Thr Gln Pro Gly Val Ile Arg Pro Thr Thr Thr Ser Pro Val
      85           90           95
Leu Val His His Pro Asp Asp Ala Phe Trp Phe Asp Gly Asp Arg Val
      100          105          110
Leu Pro Thr Leu Val Arg Ser Gln Val Ala Ser Asn Asp Ala
      115          120          125

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<210> 1273

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1273

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gccggcgaga ccggtgccgg aaagaccatg gtggtcaccg gtattggttt gctgctcggc
60
gacaaggctg aactgggatt ggtccggcat ggctgcgac gtgccgtcgt cgaagccggt
120
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttggcg gaacagtcga ggatggtgag
180
gttatctgcg ctcgacacat cagcagtcgt cgctctcgag cgctgcttgg aggagctcaa
240
gttaccgcta gtcagctggc ccacatcggt ggggatcagg tgaccatcca tggccaatct
300
gaacaagtga ggttggtcga cgcagcgcgg cagctcgacg tcgttgaccg ggctgccgga
360
gatgagctgg caggctacct aagtcgacat gcacagctgt ggtcggagtt tcgtgctgca
420
tcccagcgtc ttcagcgcct caacgaggat cgcgctgggg ccgagatgga acgcgaggtg
480
cttacgcgt
489

```

<210> 1274

<211> 163

<212> PRT

<213> Homo sapiens

<400> 1274

```

Ala Gly Glu Thr Gly Ala Gly Lys Thr Met Val Val Thr Gly Ile Gly
 1           5           10           15
Leu Leu Leu Gly Asp Lys Ala Asp Thr Gly Leu Val Arg His Gly Cys
          20           25           30
Asp Arg Ala Val Val Glu Ala Val Leu Asp Thr Pro Asp Ala Gly Arg
          35           40           45
Val Ser Glu Leu Gly Gly Thr Val Glu Asp Gly Glu Val Ile Cys Ala
          50           55           60
Arg His Ile Thr Ser Arg Arg Ser Arg Ala Leu Leu Gly Gly Ala Gln
65           70           75           80
Val Thr Ala Ser Gln Leu Ala His Ile Val Gly Asp Gln Val Thr Ile
          85           90           95
His Gly Gln Ser Glu Gln Val Arg Leu Val Asp Ala Ala Arg Gln Leu
          100          105          110
Asp Val Val Asp Arg Ala Ala Gly Asp Glu Leu Ala Gly Tyr Leu Ser
          115          120          125
Arg His Ala Gln Leu Trp Ser Glu Phe Arg Ala Ala Ser Gln Arg Leu
          130          135          140
Gln Arg Leu Asn Glu Asp Arg Ala Gly Ala Glu Met Glu Arg Glu Val
145          150          155          160
Leu Thr Arg

```

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

```

nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggaggc tgaacttctc
60
gtcgcacggc tagaggggga aatgcacgca cacagcgacc cgaccccgtc gccacaacca
120
cccgaggatg caggggttgat tgatgttgcc ctgaaagagg cgaagaaagc ctttgatgaa
180
ggcaaggctg atctaattga taaactcaat caggagatac ttgcgctggc aaacgaattc
240
ggtgcgctcg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
300
ggcaatcaga aatcagcggt cagcaggctg actcccggtg aacgtctcag gctgcgcatt
360
gctacagcca tcgcgttggt acgc
384

```

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

```

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu

```



```

      1             5             10             15
Ala Glu Leu Leu Val Ala Arg Leu Glu Gly Glu Met His Ala His Ser
      20             25             30
Asp Pro Thr Pro Ser Pro Gln Pro Pro Glu Asp Ala Gly Leu Ile Asp
      35             40             45
Val Ala Leu Lys Glu Ala Lys Lys Ala Phe Asp Glu Gly Lys Val Asp
      50             55             60
Leu Met Asp Lys Leu Asn Gln Glu Ile Leu Arg Leu Ala Asn Glu Phe
65             70             75             80
Gly Ala Leu Gly Leu Glu Ser Ile Glu Leu Gly Ser Asp Ala Lys Met
      85             90             95
Ala Val Arg Lys Gly Asn Gln Lys Ser Ala Phe Ser Arg Leu Thr Pro
      100            105            110
Gly Glu Arg Leu Arg Leu Arg Ile Ala Thr Ala Ile Ala Leu Leu Arg
      115            120            125

```

<210> 1277

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1277

```

cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
60
ccagtggctt tcttcagctc tgtttctgct tctctccctg ccatcccacc cacaaatgcc
120
atggggctgc ctagaagtgc accatccatg ccatcccagg gattagcgaa gaaaaataca
180
aagtctcctc aaccagtga tgaatgataac attcgtgaaa ctaagaacgc agtgattcga
240
gacttgggga aaaaaataac tttcagtgat gtcagaccaa accagcagga gtacaaaatt
300
tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttggaaacg tactcctggt
360
gatgaatcac atgatgaaat tcaacatgat gg
392

```

<210> 1278

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1278

```

Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser
      1             5             10             15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu
      20             25             30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro
      35             40             45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln
      50             55             60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg
65             70             75             80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln

```


[illegible]

```
<210> 1279
<211> 297
<212> DNA
<213> Homo sapiens
```

```
<400> 1279
atggagtcgc agactctccg ccacatgac gaggacgact gcgccgacaa cggcatccca
60
ctccccaaacg tcaactccag gactctctct aaggctcatcg agtactgcaa cagtcacgtc
120
cacgccgccg ccaaaccgcg tgactccgct gcctccgagg gcggcgagga cctcaagagc
180
tgggacgcga agttcgtcaa ggtggaccag gctacgctct tcgacctcat cctggctgcc
240
aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg
297
```

```
<210> 1280
<211> 99
<212> PRT
<213> Homo sapiens
```

```

<400> 1280
Met Glu Ser Gln Thr Leu Arg His Met Ile Glu Asp Asp Cys Ala Asp
 1             5             10             15
Asn Gly Ile Pro Leu Pro Asn Val Asn Ser Arg Ile Leu Ser Lys Val
          20             25             30
Ile Glu Tyr Cys Asn Ser His Val His Ala Ala Ala Lys Pro Ala Asp
          35             40             45
Ser Ala Ala Ser Glu Gly Gly Glu Asp Leu Lys Ser Trp Asp Ala Lys
 50             55             60
Phe Val Lys Val Asp Gln Ala Thr Leu Phe Asp Leu Ile Leu Ala Ala
65             70             75             80
Asn Tyr Leu Asn Ile Lys Gly Leu Leu Asp Leu Thr Cys Gln Thr Gly
          85             90             95
Ala Asp Met

```

```
<210> 1281
<211> 515
<212> DNA
<213> Homo sapiens
```

<400> 1281
acgcgtgaag ggggctttgg aggggatggc ttctggactg cacgatgggt gaacacagtt
60

ttttaaactc ttttccacat ctgtataggt ttgaaaatta tcaacaactc atggggaggg
 120
 tggcgtgccca ggtcatggct gcctggagcc cttctgagga gggccggctc aaccgaggac
 180
 gccctcccca ctaccaagta ggcactgcgg gcaggagtcg ccacccccac cccaaggaag
 240
 ttcagaacag gcaacaggag gagcctgact ccaacagagt tgggtgtcatc cggcgcacgc
 300
 ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggg ccactcaagg
 360
 ggaagatgat ccagaagctc tgctccctcc ctttgctttt gaagaacaca ggagtgcacac
 420
 gtgggggaatc taccggctta atttcttctt agtaacaggc atagtaggat caaaaaattt
 480
 ttgcttctaa tttttaaaaa cattcaatgt gtaca
 515

<210> 1282
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 1282
 Met Gly Glu His Ser Phe Leu Asn Ser Phe Pro His Leu Tyr Arg Phe
 1 5 10 15
 Glu Asn Tyr Gln Gln Leu Met Gly Arg Val Ala Cys Gln Val Met Ala
 20 25 30
 Ala Trp Ser Pro Ser Glu Glu Gly Arg Leu Asn Arg Gly Arg Pro Pro
 35 40 45
 His Tyr Gln Val Gly Thr Ala Gly Arg Ser Arg His Pro His Pro Lys
 50 55 60
 Glu Val Gln Asn Arg Gln Gln Glu Glu Pro Asp Ser Asn Arg Val Gly
 65 70 75 80
 Val Ile Arg Arg Ile Ala Lys Asp Val Thr Thr His Gln Leu Trp Glu
 85 90 95
 Pro Lys Gly Val Cys Gly Pro Leu Lys Gly Lys Met Ile Gln Lys Leu
 100 105 110
 Cys Ser Leu Pro Leu Leu Leu Lys Asn Thr Gly Val Thr Arg Gly Glu
 115 120 125
 Ser Thr Gly Leu Ile Ser Ser
 130 135

<210> 1283
 <211> 296
 <212> DNA
 <213> Homo sapiens

<400> 1283
 gaattctca caatgaactg cagtgtctgg aggaccagtt gggtagcctt actccgggtc
 60
 tccactgcag aacttatata tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa
 120
 gaatcccggc tggggctctt aggagggagg aaagttccca caggtaactc actgggtaat
 180

tttaaagagc tcaggaaagg aaggaaggat ggctttttct cttgtgagtc aagacaaggc
 240
 cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtgc tgctcn
 296

<210> 1284

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1284

Met	Asn	Cys	Ser	Val	Trp	Arg	Thr	Ser	Trp	Val	Ala	Leu	Leu	Arg	Val
1				5					10					15	
Ser	Thr	Ala	Glu	Leu	Ile	His	Ile	Cys	Phe	Val	His	Thr	Lys	Lys	Asn
			20					25					30		
Ser	Ser	Pro	Lys	Glu	Ser	Arg	Leu	Gly	Leu	Leu	Gly	Gly	Arg	Lys	Val
		35					40				45				
Pro	Thr	Gly	Asn	Ser	Leu	Val	Asn	Phe	Lys	Glu	Leu	Arg	Lys	Gly	Arg
	50					55				60					
Lys	Asp	Gly	Phe	Phe	Ser	Cys	Glu	Ser	Arg	Gln	Gly	Pro	Asp	Asp	Asn
65					70					75					80
Pro	Pro	Arg	Ser	Glu	Arg	Asn	Phe	Gln	Pro	Thr	Ser	Ala	Ala		
				85					90						

<210> 1285

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1285

gggcccttc ttacctgccc cttccccgtg ccaccaaccc gtagacaggg agggcaagca
 60
 gtgaaaggct catctagagg aggtaaaaga cagggtgag ggaaaacgcc ttgtacagtc
 120
 aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttggcca
 180
 agaagcaaca aaagggttc tacacctcag accaggagg gggaatgtgt acaaagattg
 240
 gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctctttc
 300
 aaaccacac ttcagaggca ggcttttaaa cgcttgactt ctgtcagggc cacaggctgg
 360
 gctgccc aaa gctcctacgg ggctggggga tccgagagag gacttcccac tagtccaaga
 420
 tgtggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcgggcccct
 480
 gctaagaacc tgattcgagg aaaaggaagt gaagacagta acgcgt
 526

<210> 1286

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1286

```

Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
          20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
          35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
          50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
          85           90           95
Ser Pro Arg Cys Gly Asp
          100

```

<210> 1287

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1287

```

acgcgtgaag gggagaggca gctccaggtg gaggggaagt catgaggaag cagagaggca
60
ggcgacaggc agcgtggctg gggctgggca ggccttcag tttgattgca gcccagaggt
120
caggtgagaa gaaggtacaa caagcaagga aggccccagg aagccactgg ggggtgttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgtc ggggcactgg gcactccgga attcttcaaa
300
gctctgatgc aacatgtccc caggggtgtct gac
333

```

<210> 1288

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1288

```

Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
          20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
          35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
          50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
          85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

```


100

105

<210> 1289

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1289

acgcgtgtct gtgtacaggt ggaaggggat gggatatgaga tggcgcagcg tgtgcatggg
60
cacggcgtat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt
120
cctgcacggg ggaggaggca aggtggcccc tgctgtggg cacagagccc accttccggg
180
ccagcccgag gcccctttcc cagagccccc tcccaagggg ccataccacc tgcaccccca
240
agatggcgtg gggcgccctt ggtgcaggag caggggacag tcagggaggc gtgtggcgga
300
cagtagcagc cccccagccc cctccccccc accggt
336

<210> 1290

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1290

Met	Val	Cys	Glu	Cys	Thr	Arg	Val	Pro	Glu	Ser	Cys	Lys	Leu	Leu	Ala
1				5					10					15	
Glu	Ser	Cys	Thr	Val	Glu	Glu	Ala	Arg	Trp	Pro	Leu	Pro	Val	Gly	Thr
			20					25					30		
Glu	Pro	Thr	Phe	Arg	Ser	Ser	Pro	Arg	Pro	Leu	Ser	Gln	Ser	Pro	Leu
		35					40				45				
Pro	Arg	Gly	His	Thr	Thr	Cys	Ile	Pro	Lys	Met	Ala	Trp	Gly	Val	Pro
	50					55				60					
Gly	Ala	Gly	Ala	Gly	Asp	Ser	Gln	Gly	Gly	Val	Trp	Arg	Thr	Val	Ala
65					70				75						80
Ala	Pro	Gln	Pro	Pro	Ser	Pro	His	Arg							
					85										

<210> 1291

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1291

tggccatcca cctctgtcag ctgttccggc aaccattca gatcattgtg gtagtaacga
60
atcttctgca acggcccggc accgtccacg cgagccagag gttgatagcc ttcacccca
120
taaacgtaca ggcttgtctg gctgtgttta tgctcctgca ataaccgcaa accatcccag
180
gtaaaccggg tttcccccaa cggataccca tcaactgcat gctcggtttt ttctatccga
240

cgccccagcg ggtcatacac catcctgacc acgctaccat cgtcattacg cacttcaacc
 300
 agccggcttt cagcgtcata cgcaaaccgc tgcacgccac gcttggcact gcgcttctcg
 360
 accatccgcc caaacgcgt
 379

<210> 1292

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1292

Met	Val	Glu	Lys	Arg	Ser	Ala	Lys	Arg	Gly	Val	Gln	Arg	Phe	Ala	Tyr
1			5						10					15	
Asp	Ala	Glu	Ser	Arg	Leu	Val	Glu	Val	Arg	Asn	Asp	Asp	Gly	Ser	Val
			20						25				30		
Val	Arg	Met	Val	Tyr	Asp	Pro	Leu	Gly	Arg	Arg	Ile	Glu	Lys	Thr	Glu
			35				40					45			
His	Gly	Ser	Asp	Gly	Tyr	Pro	Leu	Gly	Glu	Thr	Arg	Phe	Thr	Trp	Asp
			50			55					60				
Gly	Leu	Arg	Leu	Leu	Gln	Glu	His	Lys	His	Ser	Gln	Thr	Ser	Leu	Tyr
65					70					75				80	
Val	Tyr	Glu	Asp	Glu	Gly	Tyr	Gln	Pro	Leu	Ala	Arg	Val	Asp	Gly	Ala
			85						90				95		
Gly	Pro	Leu	Gln	Lys	Ile	Arg	Tyr	Tyr	His	Asn	Asp	Leu	Asn	Gly	Leu
			100					105					110		
Pro	Glu	Gln	Leu	Thr	Glu	Val	Asp	Gly							
			115					120							

<210> 1293

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1293

nngccggccg cccgagagct gttcgaggcg tgccgcaacg gggacgtgga acgagtcaag
 60
 aggctggtga cgcctgagaa ggtgaacagc cgcgacacgg cgggcaggaa atccaccccc
 120
 ctgcacttcg ccgcagggtt tgggcggaaa gacgtagtgt aatatttgct tcagaatggt
 180
 gcaaagtgc aagcacgtga tgatgggggc cttattcctc ttcataatgc atgctctttt
 240
 ggtcatgctg aagtagtcaa tctccttttg cgacatggtg cagaccccaa tgcttgagat
 300
 aattggaatt atactcctag aggggtggagt gtgctcgca
 340

<210> 1294

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1294

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val
 1 5 10 15
 Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp
 20 25 30
 Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly
 35 40 45
 Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln
 50 55 60
 Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe
 65 70 75 80
 Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro
 85 90 95
 Asn Ala

<210> 1295

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1295

ggatcccgga gacctcgctcg gcgaacgtca cctcgctccag ggccgaggcg cggaacaccg
 60
 acgtgtcgat gccctcgccc togatgcagt cggtcagcgg tacgacggcg ccgcgaggag
 120
 cgaaggtgcc gatctggctg cgctcggcgt agaccagcga cggcgggttcg cccgacgcca
 180
 cggaggagag gaactgctgg atgtcgaggt caccctcgat cagcttgacc ttggcgtcgc
 240
 cgagctcttc cttcgcccgg tcgagccgca ccgtcgcgat ctgctcgccg gcaccgaagc
 300
 ccatacctc gacctcgccg gagagcttcg ccccgctgtc gaaagacgcg t
 351

<210> 1296

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1296

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg
 1 5 10 15
 Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser
 20 25 30
 Ala Val Arg Arg Arg Arg Gly Arg Arg Arg Cys Arg Ser Gly Cys Ala
 35 40 45
 Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly
 50 55 60
 Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala
 65 70 75

<210> 1297

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1297

gtgcacccgg attccattg ccaccgactt cgagtaaact ccagtcccga ggacacgaga
 60
 gacacccagg cctcaggccc catgggcacg ctccacgcca cggctcctac cagagggaca
 120
 gatacactct acaaattctg gggcccacca caccaagaag acacggagga gccacaacaaa
 180
 gaaggaccat acgaaatgca cccccaaagc aaccaaccaa tccaagaaaa aatacgtctc
 240
 agggttctgt gggccctctt gcatgggctg ccctgcccc ctgttctggc ctggctcaag
 300
 caccttacc cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct
 356

<210> 1298

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1298

Met	Gly	Thr	Leu	His	Ala	Thr	Ala	Pro	Thr	Arg	Gly	Thr	Asp	Thr	Leu
1				5					10				15		
Tyr	Lys	Ser	Arg	Gly	Pro	Pro	His	Gln	Glu	Asp	Thr	Glu	Glu	Pro	Thr
			20					25				30			
Lys	Glu	Gly	Pro	Tyr	Glu	Met	His	Pro	Gln	Ser	Asn	Gln	Pro	Ile	Gln
		35					40					45			
Glu	Lys	Ile	Arg	Leu	Arg	Val	Leu	Trp	Ala	Leu	Leu	His	Gly	Leu	Pro
	50					55					60				
Cys	Pro	Pro	Val	Leu	Ala	Trp	Leu	Lys	His	Leu	Thr	Pro	Ala	Cys	Ser
65				70					75					80	
Lys	Glu	Pro	Trp	Leu	Pro	Glu	Gln	Ser	Thr	Gly					
				85					90						

<210> 1299

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1299

ggatccactt ctaagatgtc tcaactcacgt ggtgatggca gcaggcctca gactctgggtg
 60
 gttgttggca ggatgtctca gttccttgcc atgtgggtct ctacacaggg cagcttctctg
 120
 tgtctttgcc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg
 180
 gagttttctg ggggtgggtc acgggtcttg ccggagttc gccctggcaa aggcctgtgc
 240
 cagtgatcct ggagcggagc gaagtgtttc cgtgactctg cagccgcagt tcttagggct
 300
 tccttag
 307

<210> 1300
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1300
 Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser
 1 5 10 15
 Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala
 20 25 30
 Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val
 35 40 45
 Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu
 50 55 60
 Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val
 65 70 75 80
 Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro
 85 90

<210> 1301
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 1301
 ctgagcaagt taaaagaagt tcttgaattt tataacttta ttttgacaaa ctattataaa
 60
 gttgagccta tttcctttga tgcagtatac gctgaagggt tggaaatggc tgagttcttg
 120
 cgccctatgg tgtcagatac gattacactt ttgcatgacc ttagaagggtc tggcgcaaac
 180
 atcatgtttg aaggcgcgca agggctcttg ttggatgttg atcatggtac ttaccggtat
 240
 gtgacttcat ctaatacgac tgcgggcgga gcgccagcgg gaacagggtt tggtcctttg
 300
 tacttagatt atgtattagg tatcactaag gcttatacga ctgcggttg ttctggacct
 360
 ttccctactg agttgtttga cgaagatggg gagcgtcttg gtacgcgt
 408

<210> 1302
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 1302
 Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr
 1 5 10 15
 Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu
 20 25 30
 Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile
 35 40 45
 Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu

50		55		60											
Gly	Ala	Gln	Gly	Ser	Leu	Leu	Asp	Val	Asp	His	Gly	Thr	Tyr	Pro	Tyr
65				70					75					80	
Val	Thr	Ser	Ser	Asn	Thr	Thr	Ala	Gly	Gly	Ala	Pro	Ala	Gly	Thr	Gly
			85						90				95		
Phe	Gly	Pro	Leu	Tyr	Leu	Asp	Tyr	Val	Leu	Gly	Ile	Thr	Lys	Ala	Tyr
		100						105				110			
Thr	Thr	Arg	Val	Gly	Ser	Gly	Pro	Phe	Pro	Thr	Glu	Leu	Phe	Asp	Glu
		115					120					125			
Asp	Gly	Glu	Arg	Leu	Gly	Thr	Arg								
130					135										

<210> 1303

<211> 1037

<212> DNA

<213> Homo sapiens

<400> 1303

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240
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720
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<210> 1304
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1304
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 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala
 35 40 45
 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
 50 55 60
 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
 65 70 75 80
 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
 85 90 95
 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
 100 105 110
 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
 115 120 125
 Ser His Ala Trp
 130

<210> 1305
 <211> 775
 <212> DNA
 <213> Homo sapiens

<400> 1305
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 ccgcgtcttc aggggtgctta tgtcgatgcg gacggtcact gggtttcagg tactttcgac
 180
 acctcctggg agcgccctgga cgccgccgct gcgatgggat ttgacgttgt ttacctgccc
 240
 gcgatccatc ccatgggcca agccttcgcg aagggcaagg acaacaccct gaccccaggt
 300
 ccggacgata cgggatcgcc gtgggccatc ggatcgtctg atggcggcca tgacaccatt
 360
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 480
 cagcaccgag agtggttcac gaccgcggtt gatggcacca tcgcctatgc agaaaattca
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 caggaatgct tgcggctgct ggagttatgg atctcccacg gcgtgacgat tttccgcgtc
 660

gataatccac ataccaagcc tctgaatttc tgggcctggc tcatggaaca ggttcacgt
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 775

<210> 1306
 <211> 258
 <212> PRT
 <213> Homo sapiens

<400> 1306
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 20 25 30
 Tyr Gly Ser Trp Tyr Glu Phe Phe Pro Arg Ser Gln Gly Ala Tyr Val
 35 40 45
 Asp Ala Asp Gly His Trp Val Ser Gly Thr Phe Asp Thr Ser Trp Glu
 50 55 60
 Arg Leu Asp Ala Ala Ala Ala Met Gly Phe Asp Val Val Tyr Leu Pro
 65 70 75 80
 Ala Ile His Pro Met Gly Gln Ala Phe Arg Lys Gly Lys Asp Asn Thr
 85 90 95
 Leu Thr Pro Gly Pro Asp Asp Pro Gly Ser Pro Trp Ala Ile Gly Ser
 100 105 110
 Ser Asp Gly Gly His Asp Thr Ile His Pro Asp Leu Gly Thr Phe Asp
 115 120 125
 Asp Leu Asp Arg Phe Val Ala His Ala His Asp Leu Gly Met Glu Val
 130 135 140
 Ala Leu Asp Phe Ala Leu Gln Ala Ser Pro Asp His Pro Trp Val His
 145 150 155 160
 Gln His Pro Glu Trp Phe Thr Thr Arg Val Asp Gly Thr Ile Ala Tyr
 165 170 175
 Ala Glu Asn Ser Pro Lys Lys Tyr Gln Asp Ile Tyr Pro Ile Asn Phe
 180 185 190
 Asp Asn Asp Pro Asp Gly Ile Tyr Gln Glu Cys Leu Arg Leu Leu Glu
 195 200 205
 Leu Trp Ile Ser His Gly Val Thr Ile Phe Arg Val Asp Asn Pro His
 210 215 220
 Thr Lys Pro Leu Asn Phe Trp Ala Trp Leu Met Glu Gln Val His Arg
 225 230 235 240
 Arg His Pro Glu Val Ile Phe Leu Ala Glu Ala Phe Thr Arg Pro Glu
 245 250 255
 Met Ile

<210> 1307
 <211> 624
 <212> DNA
 <213> Homo sapiens

<400> 1307
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 120
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 gccacccgag gctgccgctg cagaggcaaa cagccccgag caaggcccgg caacccccagg
 240
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 300
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 360
 tgtccaggga cagccaaagg ccttgagggtc agctgggtgg aacacctttc ccctaccatc
 420
 ccgagatatt gtcttcttgg atggagtttt caaagccctc catgtggagg tctcgggatg
 480
 agaggcctcg gctgagctct gtgcagagga gcaggaagct gcagaatggg caccgcctc
 540
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<210> 1308

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1308

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His	Ala	Ala	Thr	Ala	Trp	Gly	Cys	Arg	Ala	Leu	Leu	Gly	Ala	Val	Cys
			20				25					30			
Leu	Cys	Ser	Gly	Ser	Leu	Gly	Trp	Gln	Gly	Leu	Ala	Pro	Ser	Gly	Thr
	35					40					45				
Arg	Gly	Ala	Leu	Ala	Ser	Gly	Cys	Gly	Thr	Glu	His	Val	Glu	Trp	Leu
	50					55				60					
Trp	Ser	Ser	Thr	Ala	Gln	Ala	Gln	Gly	Pro	Asp	Arg	Met	Cys	Pro	Ala
65					70				75					80	
Ser	Leu	Thr	Ser	Pro	Glu	Val	Gly	Cys	Arg	Glu	Pro	Gly	Ala	Trp	His
				85				90						95	
Ser	Pro	Pro	Ala												
			100												

<210> 1309

<211> 563

<212> DNA

<213> Homo sapiens

<400> 1309

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 120
 ttctggctgg cgggcaatgt gttgattgac cggggcaacg cgcacaaggc gcgccgctca
 180

atgctcacca ccacccacac cttgcagcat aaagacacat cgatctgggt atttgccgaa
 240
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 300
 attgccgcag gtgtgccgat cgtgcagggtg tgtgtcagca cgtatgtgaa gcacatgaag
 360
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 420
 ggactgacgt tggatgacat gccacgggtg atggagacct gccgtcaaca aatgcgcgag
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 gaagggcgtt aacgactacg cgt
 563

<210> 1310

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1310

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Thr	Gly	Val	Pro	Tyr	Arg	Thr	Val	Cys	Ile	Gly	Lys	Lys	Ser	Leu	Lys
			20					25					30		
Trp	Val	Pro	Leu	Phe	Gly	Gln	Leu	Phe	Trp	Leu	Ala	Gly	Asn	Val	Leu
		35				40						45			
Ile	Asp	Arg	Gly	Asn	Ala	His	Lys	Ala	Arg	Arg	Ser	Met	Leu	Thr	Thr
	50					55					60				
Thr	His	Thr	Leu	Gln	His	Lys	Asp	Thr	Ser	Ile	Trp	Val	Phe	Ala	Glu
65					70					75					80
Gly	Thr	Arg	Asn	Phe	Gly	Glu	Thr	Leu	Leu	Pro	Phe	Lys	Lys	Gly	Ala
			85					90						95	
Phe	Gln	Met	Ala	Ile	Ala	Ala	Gly	Val	Pro	Ile	Val	Gln	Val	Cys	Val
			100					105						110	
Ser	Thr	Tyr	Val	Lys	His	Met	Lys	Leu	Asn	Arg	Trp	Asp	Ser	Gly	Asp
		115					120					125			
Ile	Leu	Ile	Arg	Ser	Leu	Pro	Pro	Ile	Pro	Thr	Thr	Gly	Leu	Thr	Leu
	130					135						140			
Asp	Asp	Met	Pro	Arg	Leu	Met	Glu	Thr	Cys	Arg	Gln	Gln	Met	Arg	Glu
145					150					155				160	
Cys	Ile	Glu	Ala	Met	Asp	Arg	Glu	Leu	Glu	Ile	Val	Pro	Cys	Arg	Asn
			165					170						175	
Glu	Leu	Ala	Arg	Glu	Gly	Arg									
			180												

<210> 1311

<211> 674

<212> DNA

<213> Homo sapiens

<400> 1311

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 120
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 180
 gggctgaccc ccgatcagga tcgactgacc aacgagtggg cgcaggcgca cgggttgggg
 240
 gaattttatg tcatggcccc ccgaatcctc ggtgatgtcc cgctgccaac gatcaccatc
 300
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 420
 tgggtggacc aggtcatcct tgtggagggtg gctaccacaa tgctggccgc cctgatatgc
 480
 ggggtgatct cctcggttgt cgcggtgtgg ctacacaggca ggatcctgtc gggagccttg
 540
 gacctgcttg gggccgcgtg gtgggtcttc ggtgcgttgg ccgccgggat gttcggtgga
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 660
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 674

<210> 1312

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1312

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Arg	Thr	Glu	Asp	Pro	Pro	Arg	Gly	Pro	Lys	Gln	Val	Gln	Gly	Ser	Arg
		20						25				30			
Gln	Asp	Pro	Ala	Cys	Glu	Pro	His	Arg	Asp	Asn	Arg	Gly	Asp	His	Pro
		35					40					45			
Ala	Tyr	Gln	Gly	Gly	Gln	His	Cys	Gly	Ser	His	Leu	His	Lys	Asp	Asp
	50					55				60					
Leu	Val	His	Pro	Thr	Pro	Ala	Gln	Ser	Asp	Ala	Phe	Glu	Ala	Gly	His
65					70				75					80	
Gln	Ile	Thr	Val	Gly	Gly	Ser	Leu	Leu	Leu	Arg	Gln	Gln	Ala	Arg	His
			85					90					95		
Asp	Gly	Arg	Gln	His	Asp	Glu	Gly	Asp	Gly	Arg	Asp	Asp	Gly	Asp	Arg
		100					105					110			
Trp	Gln	Arg	Asp	Ile	Thr	Glu	Asp	Ser	Gly	Gly	His	Asp	Ile	Lys	Phe
	115					120					125				
Pro	Gln	Pro	Val	Arg	Leu	Arg	Pro	Leu	Val	Gly	Gln	Ser	Ile	Leu	Ile
	130				135					140					
Gly	Gly	Gln	Pro	Cys	Glu	Gln	Asn	Arg	Arg	Ser	Ser	Ala	Ser	Trp	Tyr
145				150				155						160	
Ser	Gly	Phe	Arg	Arg	Pro	Gly	Asp	Ala	Leu	Asp	Pro	Ala	Gln	Ile	Ile
			165				170					175			
Arg	Gln	Pro	Asp	Gly	Val	Cys	Arg	Val	Gly	Pro	Gly	Gly	Ile	Ile	Gly
		180					185					190			
Gln	Val	Pro	Ala												

195

<210> 1313

<211> 367

<212> DNA

<213> Homo sapiens

<400> 1313

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120
aaggaaggga gaggacagag cctggtgtga ctctggggtt tctggtgtgt atagctgggtg
180
gacagtgggtg tctttgccaa gaggggagcc ctggaagagg agaggtttgc agggcagggtg
240
ctgagtcagg ttttggatc gctgaatttg aggtatctgt cagatatgag acccaaaagg
300
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360
gtcatga
367

<210> 1314

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1314

Met	Thr	Thr	Ala	Tyr	Pro	Asp	Pro	Ser	Gln	Ser	Ser	Gly	Pro	Ala	His
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Pro	Leu	Pro	Arg	Pro	His	Leu	Leu	Gly	Leu	Ile	Ser	Asp	Arg	Tyr	Leu
			20					25					30		
Lys	Phe	Ser	Val	Ser	Lys	Thr	Gly	Leu	Ser	Thr	Cys	Pro	Ala	Asn	Leu
		35					40					45			
Ser	Ser	Ser	Arg	Ala	Pro	Leu	Leu	Ala	Lys	Thr	Pro	Leu	Ser	Thr	Ser
		50				55					60				
Tyr	Thr	His	Gln	Lys	Pro	Arg	Ser	His	Thr	Arg	Leu	Cys	Pro	Leu	Pro
65					70				75					80	
Ser	Leu	Pro	Pro	Pro	Ser	Ile	Leu	Ser	Pro	Lys	Ser	Arg	Asp	Cys	Pro
				85				90					95		
Thr	Leu	Ala	Ala	Thr	Thr	Ala	Ala	Ala	Pro	Ala	Ala	Pro	Pro	Ala	Pro
			100				105						110		
Ala	Thr	Trp	Arg	Gly	Cys	Met	Asp	Ile							
		115					120								

<210> 1315

<211> 5245

<212> DNA

<213> Homo sapiens

<400> 1315

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 120
 gaagctttga gtccttggtc aagtactgta agtaccaagt ctccagccagg cagcagtgtc
 180
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 240
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 cttaatatcc ctcatgtggt tgcttgggca caaattccag aagaaacagg gcttccacag
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 420
 gaaaagaggc gtgctataga agccagaaa aagaaaatgg aagctgcttt taccaaacag
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 1680

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4860
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4920

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<210> 1316

<211> 856

<212> PRT

<213> Homo sapiens

<400> 1316

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Asp	Met	Asp	Asp	Ala	Ser	Lys	Leu	Leu	Gln	Asp	Tyr	Asp	Ile	Arg	Thr
			20				25					30			
Gly	Asn	Thr	Arg	Glu	Ala	Leu	Ser	Pro	Cys	Pro	Ser	Thr	Val	Ser	Thr
		35				40					45				
Lys	Ser	Gln	Pro	Gly	Ser	Ser	Ala	Ser	Ser	Ser	Ser	Gly	Val	Lys	Met
	50				55					60					
Thr	Ser	Phe	Ala	Glu	Gln	Lys	Phe	Arg	Lys	Leu	Asn	His	Thr	Asp	Gly
65				70					75				80		
Lys	Ser	Ser	Gly	Ser	Ser	Gln	Lys	Thr	Thr	Pro	Glu	Gly	Ser	Glu	
			85			90						95			
Leu	Asn	Ile	Pro	His	Val	Val	Ala	Trp	Ala	Gln	Ile	Pro	Glu	Glu	Thr
			100				105					110			
Gly	Leu	Pro	Gln	Gly	Arg	Asp	Thr	Thr	Gln	Leu	Leu	Ala	Ser	Glu	Met
		115				120						125			
Val	His	Leu	Arg	Met	Lys	Leu	Glu	Glu	Lys	Arg	Arg	Ala	Ile	Glu	Ala
	130				135						140				
Gln	Lys	Lys	Lys	Met	Glu	Ala	Ala	Phe	Thr	Lys	Gln	Arg	Gln	Lys	Met
145				150					155					160	
Gly	Arg	Thr	Ala	Phe	Leu	Thr	Val	Val	Lys	Lys	Lys	Gly	Asp	Gly	Ile
			165					170				175			
Ser	Pro	Leu	Arg	Glu	Glu	Ala	Ala	Gly	Ala	Glu	Asp	Glu	Lys	Val	Tyr
			180					185				190			
Thr	Asp	Arg	Ala	Lys	Glu	Lys	Glu	Ser	Gln	Lys	Thr	Asp	Gly	Gln	Arg
	195					200					205				
Ser	Lys	Ser	Leu	Ala	Asp	Ile	Lys	Glu	Ser	Met	Glu	Asn	Pro	Gln	Ala
	210				215						220				
Lys	Trp	Leu	Lys	Ser	Pro	Thr	Thr	Pro	Ile	Asp	Pro	Glu	Lys	Gln	Trp
225				230					235					240	
Asn	Leu	Ala	Ser	Pro	Ser	Glu	Glu	Thr	Leu	Asn	Glu	Gly	Glu	Ile	Leu
			245					250					255		
Glu	Tyr	Thr	Lys	Ser	Ile	Glu	Lys	Leu	Asn	Ser	Ser	Leu	His	Phe	Leu
		260						265				270			
Gln	Gln	Glu	Met	Gln	Arg	Leu	Ser	Leu	Gln	Gln	Glu	Met	Leu	Met	Gln

		275					280					285				
Met	Arg	Glu	Gln	Gln	Ser	Trp	Val	Ile	Ser	Pro	Pro	Gln	Pro	Ser	Pro	
	290					295					300					
Gln	Lys	Gln	Ile	Arg	Asp	Phe	Lys	Pro	Ser	Lys	Gln	Ala	Gly	Leu	Ser	
305					310					315					320	
Ser	Ala	Ile	Ala	Pro	Phe	Ser	Ser	Asp	Ser	Pro	Arg	Pro	Thr	His	Pro	
				325					330					335		
Ser	Pro	Gln	Ser	Ser	Asn	Arg	Lys	Ser	Ala	Ser	Phe	Ser	Val	Lys	Ser	
			340				345					350				
Gln	Arg	Thr	Pro	Arg	Pro	Asn	Glu	Leu	Lys	Ile	Thr	Pro	Leu	Asn	Arg	
		355					360					365				
Thr	Leu	Thr	Pro	Pro	Arg	Ser	Val	Asp	Ser	Leu	Pro	Arg	Leu	Arg	Arg	
	370					375					380					
Phe	Ser	Pro	Ser	Gln	Val	Pro	Ile	Gln	Thr	Arg	Ser	Phe	Val	Cys	Phe	
385					390					395					400	
Gly	Asp	Asp	Gly	Glu	Pro	Gln	Leu	Lys	Glu	Ser	Lys	Pro	Lys	Glu	Glu	
				405					410					415		
Val	Lys	Lys	Glu	Glu	Leu	Glu	Ser	Lys	Gly	Thr	Leu	Glu	Gln	Arg	Gly	
			420				425					430				
His	Asn	Pro	Glu	Glu	Lys	Glu	Ile	Lys	Pro	Phe	Glu	Ser	Thr	Val	Ser	
		435					440					445				
Glu	Val	Leu	Ser	Leu	Pro	Val	Thr	Glu	Thr	Val	Cys	Leu	Thr	Pro	Asn	
	450					455					460					
Glu	Asp	Gln	Leu	Asn	Gln	Pro	Thr	Glu	Pro	Pro	Pro	Lys	Pro	Val	Phe	
465					470					475					480	
Pro	Pro	Thr	Ala	Pro	Lys	Asn	Val	Asn	Leu	Ile	Glu	Val	Ser	Leu	Ser	
				485					490					495		
Asp	Leu	Lys	Pro	Pro	Glu	Lys	Ala	Asp	Val	Pro	Val	Glu	Lys	Tyr	Asp	
			500					505					510			
Gly	Glu	Ser	Asp	Lys	Glu	Gln	Phe	Asp	Asp	Asp	Gln	Lys	Val	Cys	Cys	
		515					520					525				
Gly	Phe	Phe	Phe	Lys	Asp	Asp	Gln	Lys	Ala	Glu	Asn	Asp	Met	Ala	Met	
	530					535					540					
Lys	Arg	Ala	Ala	Leu	Leu	Glu	Lys	Arg	Leu	Arg	Arg	Glu	Lys	Glu	Thr	
545					550					555					560	
Gln	Leu	Arg	Lys	Gln	Gln	Leu	Glu	Ala	Glu	Met	Glu	His	Lys	Lys	Glu	
				565					570					575		
Glu	Thr	Arg	Arg	Lys	Thr	Glu	Glu	Glu	Arg	Gln	Lys	Lys	Glu	Asp	Glu	
			580					585					590			
Arg	Ala	Arg	Arg	Glu	Phe	Ile	Arg	Gln	Glu	Tyr	Met	Arg	Arg	Lys	Gln	
		595					600					605				
Leu	Lys	Leu	Met	Glu	Asp	Met	Asp	Thr	Val	Ile	Lys	Pro	Arg	Pro	Gln	
	610					615					620					
Val	Val	Lys	Gln	Lys	Lys	Gln	Arg	Pro	Lys	Ser	Ile	His	Arg	Asp	His	
625					630					635					640	
I																


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705          710          715          720
Lys Glu Pro Ser Ala Lys Ser Asn Lys His Ile Ile Gln Asn Ala Leu
          725          730          735
Ala His Cys Cys Leu Ala Gly Lys Val Asn Glu Gly Gln Lys Lys Lys
          740          745          750
Ile Leu Glu Glu Met Glu Lys Ser Asp Ala Asn Asn Phe Leu Ile Leu
          755          760          765
Phe Arg Asp Ser Gly Cys Gln Phe Arg Ser Leu Tyr Thr Tyr Cys Pro
          770          775          780
Glu Thr Glu Glu Ile Asn Lys Leu Thr Gly Ile Gly Pro Lys Ser Ile
785          790          795          800
Thr Lys Lys Met Ile Glu Gly Leu Tyr Lys Tyr Asn Ser Asp Arg Lys
          805          810          815
Gln Phe Ser His Ile Pro Ala Lys Thr Leu Ser Ala Ser Val Asp Ala
          820          825          830
Ile Thr Ile His Ser His Leu Trp Gln Thr Lys Arg Pro Val Thr Pro
          835          840          845
Lys Lys Leu Leu Pro Thr Lys Ala
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<210> 1317
 <211> 1123
 <212> DNA
 <213> Homo sapiens

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<400> 1317
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120
gagggtagcc agcctagcac catggacgcc accgcagtag caggcatcga gaccaagaaa
180
gagaaggagg acctgtgctt gctaaagaag gaggagaagg aggagccagt agccccggag
240
ctggcaacaa cgggtgcctga gagcgcagag cctgaggcag aggcggacgg ggaggagctg
300
gacggcagcg acatgtcagc catcatctat gaaatcccca aggagcctga gaagaggcgg
360
cggagcaagc ggtcgcgggg gatggatgct gacggcctgc tcgagatggt cactgcccc
420
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480
gtgcatcgga aaggaaagac caaagtgtgc cctcatcctg gctgtggcaa gaagttctat
540
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600
gagacctgcg gcaagtcctt caagaggaag aaccacctgg aggtacatcg gcgcacccac
660
accggcgaga cccccctgca gtgcgtgatc tgtggctacc agtgccggca gcgcgcgtcg
720
ctcaactggc acatgaagaa gcacactgcg gaggtgcagt acaacttcac gtgcgatgcc
780
tgcggaagc gcttcgagaa gctggacagc gtcaagttcc acacgctcaa aagccaccgg
840

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gatcacaagc ccacctgacc cacctgacca ctgaccgccc ctattttattc gtcgctcgg
900
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960
cggaaggagc gccccgccc cgccccagag ctggcgcccc tgggcagggt cccacccccg
1020
ccccaccgca tccttctcgg agctggtgcc tggggctgca ttgctggaac tgtgtcaaga
1080
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1123

<210> 1318

<211> 285

<212> PRT

<213> Homo sapiens

<400> 1318

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Gly	Ser	Gly	Leu	Gly	Glu	Glu	Val	Pro	Cys	Ala	Met	Met	Glu	Gly	Val
			20					25					30		
Ala	Ala	Tyr	Thr	Gln	Thr	Glu	Pro	Glu	Gly	Ser	Gln	Pro	Ser	Thr	Met
		35					40					45			
Asp	Ala	Thr	Ala	Val	Ala	Gly	Ile	Glu	Thr	Lys	Lys	Glu	Lys	Glu	Asp
	50					55					60				
Leu	Cys	Leu	Leu	Lys	Lys	Glu	Glu	Lys	Glu	Glu	Pro	Val	Ala	Pro	Glu
65					70				75					80	
Leu	Ala	Thr	Thr	Val	Pro	Glu	Ser	Ala	Glu	Pro	Glu	Ala	Glu	Ala	Asp
			85					90					95		
Gly	Glu	Glu	Leu	Asp	Gly	Ser	Asp	Met	Ser	Ala	Ile	Ile	Tyr	Glu	Ile
			100					105					110		
Pro	Lys	Glu	Pro	Glu	Lys	Arg	Arg	Arg	Ser	Lys	Arg	Ser	Arg	Val	Met
	115					120						125			
Asp	Ala	Asp	Gly	Leu	Leu	Glu	Met	Phe	His	Cys	Pro	Tyr	Glu	Gly	Cys
	130				135						140				
Ser	Gln	Val	Tyr	Val	Ala	Leu	Ser	Ser	Phe	Gln	Asn	His	Val	Asn	Leu
145					150					155				160	
Val	His	Arg	Lys	Gly	Lys	Thr	Lys	Val	Cys	Pro	His	Pro	Gly	Cys	Gly
			165					170					175		
Lys	Lys	Phe	Tyr	Leu	Ser	Asn	His	Leu	Arg	Arg	His	Met	Ile	Ile	His
		180					185					190			
Ser	Gly	Val	Arg	Glu	Phe	Thr	Cys	Glu	Thr	Cys	Gly	Lys	Ser	Phe	Lys
	195					200					205				
Arg	Lys	Asn	His	Leu	Glu	Val	His	Arg	Arg	Thr	His	Thr	Gly	Glu	Thr
	210					215					220				
Pro	Leu	Gln	Cys	Val	Ile	Cys	Gly	Tyr	Gln	Cys	Arg	Gln	Arg	Ala	Ser
225					230					235				240	
Leu	Asn	Trp	His	Met	Lys	Lys	His	Thr	Ala	Glu	Val	Gln	Tyr	Asn	Phe
			245					250					255		
Thr	Cys	Asp	Ala	Cys	Gly	Lys	Arg	Phe	Glu	Lys	Leu	Asp	Ser	Val	Lys
		260					265					270			
Phe	His	Thr	Leu	Lys	Ser	His	Pro	Asp	His	Lys	Pro	Thr			
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<210> 1319

<211> 538

<212> DNA

<213> Homo sapiens

<400> 1319

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 120
 ctgaatgtgt gaatgggtcc ctgggtgctt tccttcctct gggagctccg tgggagagtg
 180
 gagtcgatgc caagtcagag agcagttggg gaggaacca gaagccctgg gatggtgtct
 240
 gcatgggaat gtgtaggag gacagccaca tgggcctggg ccttccttct tctccttct
 300
 gtccccctcc cccatcccc tctctcctcc ctctcttctg gaaacccagt actgggggaa
 360
 acacacacag gtgggatgca ggtatccggg aagctcatag aagctgccac gctgctggag
 420
 tttgcctcat acaggagcgt gggcatgccc cgcgtggagt tgtgctgtgt gtgtgcatat
 480
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<210> 1320

<211> 169

<212> PRT

<213> Homo sapiens

<400> 1320

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Ser	Gln	Asn	Ser	Ala	Gly	Ser	Arg	Gly	Trp	Gly	Met	Ala	Pro	Ala	Glu
		20					25					30			
Cys	Val	Asn	Gly	Ser	Leu	Gly	Ala	Phe	Leu	Pro	Leu	Gly	Ala	Pro	Trp
	35					40						45			
Glu	Ser	Gly	Val	Asp	Ala	Lys	Ser	Glu	Ser	Ser	Trp	Gly	Gly	Thr	Gln
	50					55					60				
Lys	Pro	Trp	Asp	Gly	Val	Cys	Met	Gly	Met	Cys	Arg	Glu	Ala	Ala	Thr
65					70					75				80	
Met	Gly	Leu	Gly	Leu	Pro	Phe	Ser	Pro	Ser	Cys	Pro	Pro	Pro	Pro	Ser
				85					90					95	
Pro	Ser	Leu	Leu	Pro	Ser	Phe	Trp	Lys	Pro	Ser	Thr	Gly	Gly	Asn	Thr
		100						105					110		
His	Arg	Trp	Asp	Ala	Gly	Ile	Arg	Glu	Ala	His	Arg	Ser	Cys	His	Ala
	115					120					125				
Ala	Gly	Val	Cys	Leu	Ile	Gln	Glu	Arg	Gly	His	Ala	Pro	Arg	Gly	Val
	130					135					140				
Val	Leu	Cys	Val	Cys	Ile	Cys	Met	Val	Val	Cys	Ala	Trp	Gly	Trp	Gly
145					150					155					160
Ile	Leu	Thr	Trp	Gly	His	Ser	Gln	Ser							
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<210> 1321

<211> 1292

<212> DNA

<213> Homo sapiens

<400> 1321

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120
cgcccgatc gctcacggtg cgaacgcag aagcaggat cgtcagacc cgggcacgct
180
atcgtcaaga agatttataa caacaatgtc cttctcggcg tcaacggttc ggggaccgaa
240
atggctcgtc atgctcgcgg tatcgctac ggacgacacc gcggggagat cgtcagatgcc
300
tcgtcggccc agcgatatgt cgcagagggt gcctatcgca cgaccgccat cgcatactg
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ctaacgaacg cactcacac cgaggtagga gtggcacagg caatcgtcga attggcgcgc
420
gaagagctgg gcactcccca tgccgacgg atgatgctgc ccatcctcga tcacctcgtc
480
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540
cgtcagctct atcccgatga ggcggaaactg ggcgcacgcg ctgtcgaaat cgtcagcgg
600
gctctcgaaa tccatttgca acccgaggaa tgggtggcat tctccctgca cttcatcaat
660
cagcggtagg acagtagaga cgtttcgcgg accatgtcga tgactcagac gatctgcgac
720
gttttcaccg agctggagga cctgtggcac gttgagatcg accgttcgtc catgagcgca
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840
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900
gcagctagcc aagtggccga gcacatatcg aaagcaatcg gcaacgacct gacggaagcc
960
gaaatcaact acatcgctt acacaccacc cggctctaca acgaggtgat ggggatggat
1020
gactgacgat cgcgcacctg ttaaggctca tcggtagtgg gcaatacaca aaatggcgat
1080
gaccttctg ccggaaagcc agcaccaaag tccccagat caaaattcag atgcgtgcct
1140
aattcccacc ccgacatcca agaggtagg ggggggtgtg tgggggtggg gggtaggggt
1200
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1292

<210> 1322

<211> 317

<212> PRT

<213> Homo sapiens

<400> 1322

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Pro Gly His Val Ile Val Lys Lys Ile Tyr Asn Asn Asn Val Leu Leu
 35           40           45
Gly Val Asn Gly Ser Gly Thr Glu Met Val Val Asn Ala Arg Gly Ile
 50           55           60
Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
 65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
 85           90           95
Leu Thr Asn Ala Thr His Thr Glu Val Arg Val Ala Gln Ala Ile Val
 100          105          110
Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
 115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
 130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
 145          150          155          160
Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
 165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
 180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
 195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
 210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
 225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
 245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
 260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
 275          280          285
Ile Gly Asn Asp Leu Thr Glu Ala Glu Ile Asn Tyr Ile Ala Leu His
 290          295          300
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 305          310          315

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<210> 1323

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1323

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120

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tacctcaatg cattgagtgg tcaggggtgtg catgtcatca ccgtcaatga ctatcttgca
 180
 caacgtgatg ctgaactcaa ccgcccatta tttgagtttt tgggtttaag catcgggtgtg
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 306

<210> 1324

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1324

Arg	Val	Met	Gly	Met	Arg	His	Tyr	Asp	Val	Gln	Leu	Ile	Gly	Gly	Ile
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Thr	Leu	His	Glu	Gly	Lys	Ile	Ala	Glu	Met	Arg	Thr	Gly	Glu	Gly	Lys
			20					25					30		
Thr	Leu	Met	Gly	Thr	Leu	Ala	Cys	Tyr	Leu	Asn	Ala	Leu	Ser	Gly	Gln
			35				40					45			
Gly	Val	His	Val	Ile	Thr	Val	Asn	Asp	Tyr	Leu	Ala	Gln	Arg	Asp	Ala
	50					55				60					
Glu	Leu	Asn	Arg	Pro	Leu	Phe	Glu	Phe	Leu	Gly	Leu	Ser	Ile	Gly	Val
65					70					75				80	
Ile	Tyr	Ser	Met	Gln	Met	Pro	Ala	Glu	Lys	Ala	Gln	Ala	Tyr	Leu	Ala
				85					90					95	
Asp	Ile	Thr	Tyr	Gly	Thr										
				100											

<210> 1325

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1325

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 120
 atggtcgtgc cgtttcccg cggaggcggc accgatctcg tggcgcgctc gatccagccg
 180
 cttttgcagc gcgaactcgg acaaccggtg gtgatcgaca accgcagcgg cgcaggcggc
 240
 acgtctgggt ccagcttcgt ggcgcgggcc gttgccgacg gctacacggc tggcgtggtc
 300
 accacgagca cccacgcggg aagcgtcgcg ctctatcccc ggctggccta caaccgcaga
 360
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 391

<210> 1326

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1326

```

Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
 1          5          10          15
Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
 20          25          30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
 35          40          45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
 50          55          60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
 65          70          75          80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
 85          90          95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
100          105          110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
115          120          125
Ile Gly
130

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<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

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nnacgcgtga ttctcggaact gcagcagttc gagcagtcgc atggacagag cgacggggagc
60
tactggctat ggctcgagct gctgtggcga gactatttcc gctttctgca tcttcggcat
120
ggcgctcggc tgtaccgcgc acgcggcctc gcaaattgagg tacggcacgc ggagcgccca
180
gatgtgcagg gcttcgagcg ctggcgctcg gcatcgaccg gcgagccgct cgtcgatgcc
240
gcatgacgag agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcacgagct ggga
324

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<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

```

Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1          5          10          15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
 20          25          30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
 35          40          45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

```


50		55		60	
Phe	Glu	Arg	Trp	Arg	Arg
65		70		75	
Ala	Met	Arg	Glu	Leu	Glu
		85		90	
Gln	Val	Val	Ala	Ser	Tyr
		100		105	

<210> 1329
 <211> 438
 <212> DNA
 <213> Homo sapiens

<400> 1329
 ngtgcacgct tagcattaga tttagcttcc agtggcaaaa ctacgtcggt gatttcaagc
 60
 ggcgatatcg gcatttacgc gatggcgacc ctggtgtttg aactgctgga tagacaactc
 120
 cagggccttg aagaccatcc tgaatgggta gatgttgaaa tcgatgtggt acctggcatc
 180
 tctgcaatgc aagctgggtgc aagtcgtatt ggtgcgatgt taggtcatga cttttgtacg
 240
 gtgagtttgt ctgatttatt aacccttgg gaaactatta ataaacgtat tcatagtgc
 300
 ggtgaggggg attttgttat ctctttttat aaccctgttt ctaagaaacg tgattggcag
 360
 cttaaccacg cgcgtgatgt attattgaaa taccgtccag catcaacgcc agttttatta
 420
 ggtcgtcagt tgacgcgt
 438

<210> 1330
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1330															
Xaa	Ala	Arg	Leu	Ala	Leu	Asp	Leu	Ala	Ser	Ser	Gly	Lys	Thr	Thr	Ser
1			5						10					15	
Leu	Ile	Ser	Ser	Gly	Asp	Ile	Gly	Ile	Tyr	Ala	Met	Ala	Thr	Leu	Val
		20					25						30		
Phe	Glu	Leu	Leu	Asp	Arg	Gln	Leu	Gln	Gly	Leu	Glu	Asp	His	Pro	Glu
	35					40					45				
Trp	Leu	Asp	Val	Glu	Ile	Asp	Val	Val	Pro	Gly	Ile	Ser	Ala	Met	Gln
	50				55					60					
Ala	Gly	Ala	Ser	Arg	Ile	Gly	Ala	Met	Leu	Gly	His	Asp	Phe	Cys	Thr
65				70				75						80	
Val	Ser	Leu	Ser	Asp	Leu	Leu	Thr	Pro	Trp	Glu	Thr	Ile	Asn	Lys	Arg
		85				90							95		
Ile	His	Ser	Ala	Gly	Glu	Gly	Asp	Phe	Val	Ile	Ser	Phe	Tyr	Asn	Pro
		100				105						110			
Val	Ser	Lys	Lys	Arg	Asp	Trp	Gln	Leu	Asn	His	Ala	Arg	Asp	Val	Leu
		115				120						125			
Leu	Lys	Tyr	Arg	Pro	Ala	Ser	Thr	Pro	Val	Leu	Leu	Gly	Arg	Gln	Leu

130 135 140
 Thr Arg
 145

 <210> 1331
 <211> 453
 <212> DNA
 <213> Homo sapiens

 <400> 1331
 gcgtaccgct ccgcggaact ggtgatgatg accgaggcac cgggatgcgg aatccccctgg
 60
 catcttcttg ccggcatcgg acgcacgaa tccggtcacg ccaacggcgg caagacgacc
 120
 tcggtgggta cgaacgtcac cccgatcctc ggccccatcc tcgacggacg gctggcaggc
 180
 aacgaagtca ttcgggacac cgacaagggc aatcgacggc gaccactca cgaccgcgcc
 240
 gtcgggccga tgcagttcat tccggccacc tgggccggat atgccagcga cggcaacggg
 300
 gacggaatca aggaccccaa caacgtcttc gatgcggcac tctcggcagc gaagtacctc
 360
 tgcagcggcg gactcaacct gcgcgatgtc gcccaggaga ccaaagctgt tctgcgatac
 420
 aacaactcgg ccgcttacgc agcaaacgtg atc
 453

 <210> 1332
 <211> 151
 <212> PRT
 <213> Homo sapiens

 <400> 1332
 Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys
 1 5 10 15
 Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly
 20 25 30
 His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro
 35 40 45
 Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile
 50 55 60
 Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala
 65 70 75 80
 Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser
 85 90 95
 Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala
 100 105 110
 Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg
 115 120 125
 Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala
 130 135 140
 Ala Tyr Ala Ala Asn Val Ile
 145 150

<210> 1333
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 1333
 acgcgtcgcc cacactgttg ccgccgaggg ggctcgagcc ggggtgtgagg aaggatccgc
 60
 ggcacagctc gtcgggtcaag atgggtctag tgctgctcgt atggcggcgg aggcacccgc
 120
 gcgaaggggt aaagcggatg gactaagcca gcttgtcatc gatgtcaatg gagacgccgt
 180
 cagcgtcgcg acggaaatca cccggcctac tcgtctatta gcccttattg gactaaccga
 240
 agtacacggg cgggcgagcg aaatgtgtat tttgctggct cgctgaggcc gttgcagcga
 300
 tacaatgatg aggtgtctaa gtattttccg gtccaccggg agaaccgcga gcagcgttct
 360
 ctcaatcaga tcgtcgacat cctgcacat ggcggtctta tcgcctaccc gacagacacg
 420
 gggttatgcct tcgggtgccc gntaggggaat aaggatgccg tggaccggat tcgcaaactt
 480
 cgccagttat ttgacaagca tcacttcacc ctgggtcatga gccagtttgc gcagggtggc
 540

<210> 1334
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1334
 Val His Pro Glu Asn Pro Gln Gln Arg Ser Leu Asn Gln Ile Val Asp
 1 5 10 15
 Ile Leu His His Gly Gly Leu Ile Ala Tyr Pro Thr Asp Thr Gly Tyr
 20 25 30
 Ala Phe Gly Ala Arg Xaa Gly Asn Lys Asp Ala Val Asp Arg Ile Arg
 35 40 45
 Lys Leu Arg Gln Leu Phe Asp Lys His His Phe Thr Leu Val Met Ser
 50 55 60
 Gln Phe Ala Gln Val Gly
 65 70

<210> 1335
 <211> 748
 <212> DNA
 <213> Homo sapiens

<400> 1335
 nctctcatat tttttttccc ttttctatc cccctctct cgcaccgcgt gaagcgttct
 60
 gtgaatgcc aagaagaagc tcgtgaggtc ctcgatcagg cctccgggta ccgtgggtcag
 120
 cgctcgcgcc tgtaccgcaa ggccaaggag cagaccctcc attcggccac ttattcggtc
 180

cgtgaccgtc gtgctaagaa gggtagcttc cgctcgctgt ggatccagcg catcaatgct
 240
 gcttcccgtg cccagggcat gacctacaac cgtttcatca acggtctgaa gaacgctggc
 300
 gtcgaggtcg accgcaagat gctcgctgag cttgccgtct ccgacattaa cgccttcaac
 360
 agcctggctg aggtcgctaa ggctagccag ccgcagaacg ctgctgcctg agatggccat
 420
 gactggcggg ccgaacgacg actatttggg atgggatcgc atctcgaagg ggtcattgcg
 480
 ttcggcccgt cgtctttcat ctccggcggg acgcgatgag tccgggctgt tcttggtaga
 540
 aggtgcgcag gcagttcgtg aagccctagc atggccgggt aaagtcaatt tgttggcaac
 600
 ctcggaccca gctcgcgatg ctgagcatgt cgaggtggct acatgtcgtg gcgttcgggt
 660
 cgtggtgctc actgacgagg atgtcaatgc gctttctgat accgtcacca gtcaggggat
 720
 cttcgcggta tgcggcagg ttacgcgt
 748

<210> 1336

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1336

Xaa	Leu	Ile	Leu	Phe	Phe	Pro	Ile	Pro	Ile	Pro	Pro	Leu	Ser	Asp	Arg
1			5					10						15	
Val	Lys	Arg	Ser	Val	Asn	Ala	Lys	Lys	Lys	Arg	Arg	Glu	Val	Leu	Asp
			20					25						30	
Gln	Ala	Ser	Gly	Tyr	Arg	Gly	Gln	Arg	Ser	Arg	Leu	Tyr	Arg	Lys	Ala
			35				40					45			
Lys	Glu	Gln	Thr	Leu	His	Ser	Ala	Thr	Tyr	Ser	Phe	Arg	Asp	Arg	Arg
			50				55				60				
Ala	Lys	Lys	Gly	Asp	Phe	Arg	Ser	Leu	Trp	Ile	Gln	Arg	Ile	Asn	Ala
65					70					75				80	
Ala	Ser	Arg	Ala	Gln	Gly	Met	Thr	Tyr	Asn	Arg	Phe	Ile	Asn	Gly	Leu
				85					90					95	
Lys	Asn	Ala	Gly	Val	Glu	Val	Asp	Arg	Lys	Met	Leu	Ala	Glu	Leu	Ala
			100					105					110		
Val	Ser	Asp	Ile	Asn	Ala	Phe	Asn	Ser	Leu	Val	Glu	Val	Ala	Lys	Ala
			115				120						125		
Ser	Gln	Pro	Gln	Asn	Ala	Ala	Ala								
			130				135								

<210> 1337

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1337

acgcgtgagg ccaggccact gggcaccgcc gtagccagg gcagcctcct tcagtgggtca
 60

aggcagactc agctcatggg cgagcatgtc agtgaagggc acagcaaggc tcacgagtgg
 120
 gcctcttgcc tcatggtcag tgtgggtcag tgctttcgct gtatgagact acaggggttc
 180
 tctgectcac catgggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg
 240
 ggcaactgcag gatgtggggc agggctccta cgtgccagct accagatgcc agcagcaccc
 300
 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtcagagtg
 360
 gcc
 364

<210> 1338
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 1338
 Met Gly Glu His Val Ser Glu Gly His Ser Lys Ala His Glu Trp Ala
 1 5 10 15
 Ser Cys Leu Met Val Ser Val Gly Gln Cys Phe Arg Cys Met Arg Leu
 20 25 30
 Gln Gly Phe Ser Ala Ser Pro Trp Gly Thr Ile Gly Ser Gly Ser Leu
 35 40 45
 Pro Ala Val Gly Pro Val Leu Gly Thr Ala Gly Cys Gly Ala Gly Leu
 50 55 60
 Leu Arg Ala Ser Tyr Gln Met Pro Ala Ala Pro Pro Glu Val Thr Thr
 65 70 75 80
 Thr Thr Ile Ser Arg Cys Cys Gln Cys Pro Leu Gly Val Arg Val Ala
 85 90 95

<210> 1339
 <211> 653
 <212> DNA
 <213> Homo sapiens

<400> 1339
 cgcgttgtct tcaacatcga cgaaaagcag tgcattgacc tggcgccaccg tggactgag
 60
 tgggtcgta ggtacgccga caagtacctc ggcgacgttg agttcggcta cgagtactct
 120
 ccggagatgt ttageccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgatg
 180
 gacgtgtggc agccggggcc aggcctgag attatcctta atctgccggc taccgtcgag
 240
 atgagtactc cgaacaccta cgccgaccaa atcgagtact tctgccgcaa tatccgtgat
 300
 cgtgagcacg tgtgcgtctc ttgaccccg cacaatgac gtggcacggc gatcgccggc
 360
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc
 420
 gagcgcccgg gcaccgtcga cctggtcacc ctgggcatga acctcgtcag ccagggagtt
 480

gacgccggta tcgacttctc cgacatgccc aagatccgcc gcaccgtcga gtactgcacc
 540
 tgtctgccag taccggcccc ccagccctac tccggcgatc tgggtcttcac cgccttctcc
 600
 ggttcccacc aggacgccat caagaagggt ctggaagacc tggcccggcg cgc
 653

<210> 1340

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1340

Arg	Val	Val	Phe	Asn	Ile	Asp	Glu	Lys	Gln	Cys	Ile	Asp	Leu	Ala	His
1				5					10					15	
Arg	Gly	Thr	Glu	Trp	Val	Val	Arg	Tyr	Ala	Asp	Lys	Tyr	Leu	Gly	Asp
			20					25					30		
Val	Glu	Phe	Gly	Tyr	Glu	Tyr	Ser	Pro	Glu	Met	Phe	Ser	Gln	Thr	Arg
		35					40					45			
Thr	Asp	Phe	Ala	Ile	Asp	Val	Cys	His	Ser	Val	Met	Asp	Val	Trp	Gln
	50					55					60				
Pro	Gly	Pro	Gly	Arg	Glu	Ile	Ile	Leu	Asn	Leu	Pro	Ala	Thr	Val	Glu
65					70					75				80	
Met	Ser	Thr	Pro	Asn	Thr	Tyr	Ala	Asp	Gln	Ile	Glu	Tyr	Phe	Cys	Arg
				85					90					95	
Asn	Ile	Arg	Asp	Arg	Glu	His	Val	Cys	Val	Ser	Leu	His	Pro	His	Asn
			100						105				110		
Asp	Arg	Gly	Thr	Ala	Ile	Ala	Ala	Ala	Glu	Phe	Ala	Gln	Met	Ala	Gly
		115					120					125			
Ala	Asp	Arg	Val	Glu	Gly	Cys	Phe	Phe	Gly	Pro	Gly	Glu	Arg	Pro	Gly
	130					135					140				
Thr	Val	Asp	Leu	Val	Thr	Leu	Gly	Met	Asn	Leu	Val	Ser	Gln	Gly	Val
145					150					155				160	
Asp	Ala	Gly	Ile	Asp	Phe	Ser	Asp	Met	Pro	Lys	Ile	Arg	Arg	Thr	Val
			165						170					175	
Glu	Tyr	Cys	Thr	Cys	Leu	Pro	Val	Pro	Ala	Arg	Gln	Pro	Tyr	Ser	Gly
			180					185					190		
Asp	Leu	Val	Phe	Thr	Ala	Phe	Ser	Gly	Ser	His	Gln	Asp	Ala	Ile	Lys
	195						200					205			
Lys	Gly	Leu	Glu	Asp	Leu	Ala	Arg	Arg							
	210					215									

<210> 1341

<211> 666

<212> DNA

<213> Homo sapiens

<400> 1341

accggttgct gatttccttg ttggagtctt caccactatg agcagtgact ccattgtttt
 60
 gcaaagtttc ttgccttgct ttgatcatat tttcacaact ggattcccaa cagaagtgtg
 120
 gcaatctgta atagaaaagt tggcaaagaa aggattatgg cattcatttc tgcttctgtc
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct
 240
 ctttgagaaa tacgttttca ttggacttta tgagaagatg gaacaagtgc ccaagttagt
 300
 ccagtggctc atctccattg gtgcaagtgt tgagactata ggaccgtatc cccttcatgc
 360
 cctcatgcga ctctgtatcc aagccagaga aaaccatctt ttccggtggt taatggatca
 420
 caagcccagag tggaaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca
 480
 cgctcgtcgt gccactccc caggatacct cgттаagcga caaacagagg atgtgcagat
 540
 gctcctgcgc tttggggcag atcccacttt gctggatcga cagtctcggt ctgttggtga
 600
 tgtcctgaag aggaataaga acttcaaagc catcgagaaa atcaacagtc acttagaaaa
 660
 gctagc
 666

<210> 1342

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1342

Met	Ser	Ser	Asp	Ser	Ile	Val	Leu	Gln	Ser	Phe	Leu	Pro	Cys	Phe	Asp
1				5					10					15	
His	Ile	Phe	Thr	Thr	Gly	Phe	Pro	Thr	Glu	Val	Trp	Gln	Ser	Val	Ile
			20					25					30		
Glu	Lys	Leu	Ala	Lys	Lys	Gly	Leu	Trp	His	Ser	Phe	Leu	Leu	Leu	Ser
		35					40					45			
Ala	Lys	Lys	Asp	Arg	Leu	Pro	Arg	Asn	Ile	His	Val	Pro	Glu	Leu	Ser
	50					55					60				
Leu	Lys	Ser	Leu	Phe	Glu	Lys	Tyr	Val	Phe	Ile	Gly	Leu	Tyr	Glu	Lys
65					70				75					80	
Met	Glu	Gln	Val	Pro	Lys	Leu	Val	Gln	Trp	Leu	Ile	Ser	Ile	Gly	Ala
				85				90						95	
Ser	Val	Glu	Thr	Ile	Gly	Pro	Tyr	Pro	Leu	His	Ala	Leu	Met	Arg	Leu
			100					105					110		
Cys	Ile	Gln	Ala	Arg	Glu	Asn	His	Leu	Phe	Arg	Trp	Leu	Met	Asp	His
		115					120					125			
Lys	Pro	Glu	Trp	Lys	Gly	Arg	Ile	Asn	Gln	Lys	Asp	Gly	Asp	Gly	Cys
	130					135					140				
Thr	Val	Leu	His	Val	Val	Ala	Ala	His	Ser	Pro	Gly	Tyr	Leu	Val	Lys
145					150					155				160	
Arg	Gln	Thr	Glu	Asp	Val	Gln	Met	Leu	Leu	Arg	Phe	Gly	Ala	Asp	Pro
				165				170						175	
Thr	Leu	Leu	Asp	Arg	Gln	Ser	Arg	Ser	Val	Val	Asp	Val	Leu	Lys	Arg
			180				185					190			
Asn	Lys	Asn	Phe	Lys	Ala	Ile	Glu	Lys	Ile	Asn	Ser	His	Leu	Glu	Lys
		195					200					205			
Leu															

<210> 1343
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 1343
 ccggaaatgt gccgagttct cctgacgcac gaagtgatgt gtagtcgatg ctgcgaaaag
 60
 aaaagctgtg gaaaccgaaa tgagactcca tcggacccag tcataattga cagattcttt
 120
 ttaaaatttt ttctcaagtg caatcagaat tgtttgaaaa cagcaggaaa cccaagggac
 180
 atgagacggg ttccaggttgt gttgtcaaca acgggtgaatg tggatggaca cgtcctggct
 240
 gtttctgaca acatgtttgt tcataacaac
 270

<210> 1344
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1344
 Pro Glu Met Cys Arg Val Leu Leu Thr His Glu Val Met Cys Ser Arg
 1 5 10 15
 Cys Cys Glu Lys Lys Ser Cys Gly Asn Arg Asn Glu Thr Pro Ser Asp
 20 25 30
 Pro Val Ile Ile Asp Arg Phe Phe Leu Lys Phe Phe Leu Lys Cys Asn
 35 40 45
 Gln Asn Cys Leu Lys Thr Ala Gly Asn Pro Arg Asp Met Arg Arg Phe
 50 55 60
 Gln Val Val Leu Ser Thr Thr Val Asn Val Asp Gly His Val Leu Ala
 65 70 75 80
 Val Ser Asp Asn Met Phe Val His Asn Asn
 85 90

<210> 1345
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1345
 acgcgtttga aaccaccga tgacttgctg gtgatcctgg gtaccgcgt cagcaacttc
 60
 agcggcaccg acaacaccga cttctacgac ccgaccaagg ccgacaaccg tctcacctac
 120
 cgccagacgg gcgtcgtcac gccctatgcc ggcacgtct acgacctgaa tgacatctgg
 180
 tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaagga cgccgaccgc
 240
 aagttgctcg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcgtttttc
 300
 gacggccgcc tgaacgccag ttttgccgca ttccgcatcg aacaggacaa cgtcgcacag
 360

tacgtttccg ggtttgagac cgactcgtgt atcgcccatt gc
402

<210> 1346
<211> 134
<212> PRT
<213> Homo sapiens

<400> 1346
Thr Arg Leu Lys Pro Thr Asp Asp Leu Ser Val Ile Leu Gly Thr Arg
1 5 10 15
Val Ser Asn Phe Ser Gly Thr Asp Asn Thr Asp Phe Tyr Asp Pro Thr
20 25 30
Lys Ala Asp Asn Arg Leu Thr Tyr Arg Gln Thr Gly Val Val Thr Pro
35 40 45
Tyr Ala Gly Ile Val Tyr Asp Leu Asn Asp Ile Trp Ser Val Tyr Thr
50 55 60
Ser Tyr Thr Lys Ile Tyr Lys Pro Gln Asn Ser Lys Asp Ala Asp Arg
65 70 75 80
Lys Leu Leu Asp Pro Ile Glu Gly Asp Thr Tyr Glu Ala Gly Leu Lys
85 90 95
Ala Ala Phe Phe Asp Gly Arg Leu Asn Ala Ser Phe Ala Ala Phe Arg
100 105 110
Ile Glu Gln Asp Asn Val Ala Gln Tyr Val Ser Gly Phe Glu Thr Asp
115 120 125
Ser Cys Ile Ala His Cys
130

<210> 1347
<211> 415
<212> DNA
<213> Homo sapiens

<400> 1347
naccaccttc tgggcagget ctcattcttt cattccaaga agcatttatt aaagactggc
60
tagggcgagg gaaccagct aggggctggg gataaaaaat aagaaataac tgaaggacct
120
tgctcttaag gaactccatc ttactgggtg gagccaaacg agaaaagaga gctcgggagg
180
gcaccaaagc ggtcttgccg aaattgacct aggcagggga aggggcacgc tttctgaaaa
240
accccccaa accgattcca ggaagcccaa agggcgggcc ctctgcccgc agcactgcct
300
tcacgtttac ttccatcccc gcctcctcct tcccctaagg cttggcatgc aacatccctg
360
cttctcacc accttttatt taagactcct attatctgca cacaatggaa gttag
415

<210> 1348
<211> 105
<212> PRT
<213> Homo sapiens

<400> 1348

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Met Glu Val Asn Val Lys Ala Val Leu Arg Ala Glu Gly Pro Pro Phe
 1           5           10           15
Gly Leu Pro Gly Ile Gly Leu Gly Gly Phe Phe Arg Lys Arg Ala Pro
 20           25           30
Ser Pro Ala Ser Gly Asn Phe Gly Lys Thr Ala Leu Val Pro Ser Arg
 35           40           45
Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
 50           55           60
Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
 65           70           75           80
Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
 85           90           95
Arg Met Arg Ala Cys Pro Glu Gly Gly
          100          105

```

<210> 1349

<211> 924

<212> DNA

<213> Homo sapiens

<400> 1349

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gccgggatcg tcacaccaca gcagggtcgcg ttaccccatg acgtcttccg tgagcttggc
60
gctcagacgg tcattgcgttc gatcgccgaa aagcttggcc ttccggtcatt cgtaagccg
120
gcacgtgggg gctcaagcct cggcgtcaca aaagtcgatg gcgtcgacga tcttctcag
180
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924

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<210> 1350
 <211> 209
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn
 50 55 60
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Glu Phe Ile Val Gly
 65 70 75 80
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val
 85 90 95
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser
 100 105 110
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile
 115 120 125
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln
 130 135 140
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp
 145 150 155 160
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met
 165 170 175
 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp
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 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His
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<210> 1351
 <211> 398
 <212> DNA
 <213> Homo sapiens

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 180
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 atgctcccga gcatgccgac gtccgcatcg acggggagcg cggcgatcga tcgcaccatc
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398

<210> 1352
<211> 70
<212> PRT
<213> Homo sapiens

<400> 1352
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Cys Thr Met Gly Asp Glu Thr Gln Asn Ala Leu Leu Leu Ser Ile Leu
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Leu His Pro Gly Leu Leu Ile Val Asp His Ile His Phe Gln Tyr Asn
35 40 45
Gly Phe Leu Ile Arg Gly Pro Leu Tyr Arg Leu Gly Ala Arg Thr Asp
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Ala Ser Ala Leu Phe Leu
65 70

<210> 1353
<211> 480
<212> DNA
<213> Homo sapiens

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<210> 1354
<211> 160
<212> PRT
<213> Homo sapiens

<400> 1354
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Val Arg Gly Ile Gly Gln Pro Arg Gly Asn Met Leu Leu Val Gly Ile

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Gly	Gly	Ser	Gly	Arg	Gln	Ser	Leu	Ala	Arg	Leu	Ala	Ser	Ser	Ile	Cys	
	50					55					60					
Asp	Tyr	Thr	Thr	Phe	Gln	Ile	Glu	Val	Thr	Lys	His	Tyr	Arg	Lys	Gln	
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Glu	Phe	Arg	Asp	Asp	Ile	Lys	Arg	Leu	Tyr	Arg	Gln	Ala	Gly	Val	Glu	
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Leu	Lys	Thr	Thr	Ser	Phe	Ile	Phe	Val	Asp	Thr	Gln	Ile	Ala	Asp	Glu	
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<212> DNA
<213> Homo sapiens
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960

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<210> 1356

<211> 244

<212> PRT

<213> Homo sapiens

<400> 1356

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Cys	Asp	Arg	Cys	Cys	Pro	Gly	Phe	Asn	Gln	Gln	Pro	Trp	Lys	Pro	Ala
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Thr	Ala	Asn	Ser	Ala	Asn	Glu	Cys	Gln	Ser	Cys	Asn	Cys	Tyr	Gly	His
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Ala	Thr	Asp	Cys	Tyr	Tyr	Asp	Pro	Glu	Val	Asp	Arg	Arg	Arg	Ala	Ser
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Gln	His	His	Thr	Ala	Gly	Val	Asn	Cys	Glu	Arg	Cys	Leu	Pro	Gly	Phe
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	130				135					140					
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145				150						155				160	
Cys	Ala	Glu	Gly	Phe	Thr	Gly	Phe	Pro	Ser	Cys	Tyr	Pro	Thr	Pro	Ser
			165					170					175		
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Asn	Cys	Asp	Cys	Ser	Ala	Ala	Gly	Thr	Gln	Gly	Asn	Ala	Cys	Arg	Lys
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His	Cys	Glu	Leu	Cys	Ala	Pro	Gly	Phe	Tyr	Gly	Pro	Gly	Cys	Pro	Gly
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<210> 1357

<211> 663

<212> DNA

<213> Homo sapiens

<400> 1357

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<210> 1358

<211> 221

<212> PRT

<213> Homo sapiens

<400> 1358

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			20					25					30		
Cys	Gly	Phe	Gly	Thr	Glu	Val	Glu	Phe	Asn	Thr	Pro	Val	Leu	Pro	Val
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Gly	Gly	Val	Arg	Pro	Val	Ile	Leu	Gln	Arg	Pro	Gly	Trp	Cys	Pro	Gly
		50				55					60				
Val	Phe	Val	Gly	Leu	Pro	Asn	His	His	Leu	Asp	Gly	Val	Ala	Met	Trp
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Cys	Glu	Leu	Leu	Ala	Ala	Val	Phe	Cys	Ala	Arg	Ala	Cys	Leu	Ala	Trp
				85					90					95	
Leu	Gln	Glu	Ser	Leu	Ala	His	Arg	Ala	Ser	Ala	Ser	Val	Lys	Ser	Gln
			100					105					110		
Leu	Arg	Arg	Asp	Ile	Leu	Gln	Ala	Arg	Leu	Ser	Arg	Pro	Thr	Asp	Ala
		115				120						125			
Thr	Met	Pro	Ser	Arg	Thr	Leu	Ile	Ser	Leu	Met	Thr	Thr	Gly	Leu	Asp
	130					135					140				
Ala	Leu	Asp	Gly	Tyr	Tyr	Ser	Lys	Tyr	Leu	Pro	Gln	Leu	Val	Leu	Ala
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Val	Ile	Val	Pro	Ala	Val	Leu	Ala	Thr	Ala	Ile	Gly	Leu	Asn	Asp	Leu
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Thr	Ser	Leu	Val	Ile	Val	Val	Val	Thr	Ile	Pro	Leu	Ile	Pro	Val	Phe
			180					185					190		
Met	Ala	Leu	Ile	Gly	Trp	Arg	Thr	Glu	Ala	Ala	Val	Ala	Lys	Arg	Phe
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 <211> 423
 <212> DNA
 <213> Homo sapiens

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 423

<210> 1360
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 <212> PRT
 <213> Homo sapiens

<400> 1360
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 Asp Val Phe Tyr Pro Leu Trp Glu Asp Asp Tyr Val Val Ala Met Pro
 35 40 45
 Val Gly Tyr Trp Leu Ala Asp Tyr Thr Ser Leu Ser Ile Lys Gln Ile
 50 55 60
 Asp Lys Gln Pro Phe Val Ser Arg Thr Pro Cys Asp Ile Leu Glu Ser
 65 70 75 80
 Trp Asn Phe Ile Met Gln Lys Gln Gly Leu Ser Thr Asp Val Arg Ala
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 <212> DNA
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4560
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<210> 1362

<211> 1587

<212> PRT

<213> Homo sapiens

<400> 1362

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			20					25					30		
Gln	Arg	Cys	Leu	Pro	Val	Phe	Glu	Asn	Ala	Ala	Phe	Gly	Arg	Leu	Ala
		35					40					45			
Gln	Ala	Ser	His	Thr	Cys	Gly	Ser	Pro	Pro	Glu	Asp	Phe	Cys	Pro	His
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Val	Gly	Ala	Ala	Gly	Ala	Gly	Ala	His	Cys	Gln	Arg	Cys	Asp	Ala	Ala
	65				70					75				80	
Asp	Pro	Gln	Arg	His	His	Asn	Ala	Ser	Tyr	Leu	Thr	Asp	Phe	His	Ser
				85					90					95	
Gln	Asp	Glu	Ser	Thr	Trp	Trp	Gln	Ser	Pro	Ser	Met	Ala	Phe	Gly	Val
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Gln	Tyr	Pro	Thr	Ser	Val	Asn	Ile	Thr	Leu	Arg	Leu	Gly	Lys	Ala	Tyr
	115					120						125			
Glu	Ile	Thr	Tyr	Val	Arg	Leu	Lys	Phe	His	Thr	Ser	Arg	Pro	Glu	Ser
	130					135					140				
Phe	Ala	Ile	Tyr	Lys	Arg	Ser	Arg	Ala	Asp	Gly	Pro	Trp	Glu	Pro	Tyr
	145				150					155				160	
Gln	Phe	Tyr	Ser	Ala	Ser	Cys	Gln	Lys	Thr	Tyr	Gly	Arg	Pro	Glu	Gly
				165					170					175	
Gln	Tyr	Leu	Arg	Pro	Gly	Glu	Asp	Glu	Arg	Val	Ala	Phe	Cys	Thr	Ser
			180				185						190		
Glu	Phe	Ser	Asp	Ile	Ser	Pro	Leu	Ser	Gly	Gly	Asn	Val	Ala	Phe	Ser
	195					200						205			
Thr	Leu	Glu	Gly	Arg	Pro	Ser	Ala	Tyr	Asn	Phe	Glu	Glu	Ser	Pro	Gly
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Leu	Gln	Glu	Trp	Val	Thr	Ser	Thr	Glu	Leu	Leu	Ile	Ser	Leu	Asp	Arg
	225				230					235				240	
Leu	Asn	Thr	Phe	Gly	Asp	Asp	Ile	Phe	Lys	Asp	Pro	Lys	Val	Leu	Gln
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Ser	Tyr	Tyr	Tyr	Ala	Val	Ser	Asp	Phe	Ser	Val	Gly	Gly	Arg	Cys	Lys

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Cys	Asn	Gly	His	Ala	Ser	Glu	Cys	Gly	Pro	Asp	Val	Ala	Gly	Gln	Leu		
		275					280					285					
Ala	Cys	Arg	Cys	Gln	His	Asn	Thr	Thr	Gly	Thr	Asp	Cys	Glu	Arg	Cys		
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Leu	Pro	Phe	Phe	Gln	Asp	Arg	Pro	Trp	Ala	Arg	Gly	Thr	Ala	Glu	Ala		
305					310					315					320		
Ala	His	Glu	Cys	Leu	Pro	Cys	Asn	Cys	Ser	Gly	Arg	Ser	Glu	Glu	Cys		
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Thr	Phe	Asp	Arg	Glu	Leu	Phe	Arg	Ser	Thr	Gly	His	Gly	Gly	Arg	Cys		
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His	His	Cys	Arg	Asp	His	Thr	Ala	Gly	Pro	His	Cys	Glu	Arg	Cys	Gln		
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Glu	Asn	Phe	Tyr	His	Trp	Asp	Pro	Arg	Met	Pro	Cys	Gln	Pro	Cys	Asp		
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Cys	Gln	Ser	Ala	Gly	Ser	Leu	His	Leu	Gln	Cys	Asp	Asp	Thr	Gly	Thr		
385					390					395					400		
Cys	Ala	Cys	Lys	Pro	Thr	Val	Thr	Gly	Trp	Lys	Cys	Asp	Arg	Cys	Leu		
			405					410						415			
Pro	Gly	Phe	His	Ser	Leu	Ser	Glu	Gly	Gly	Cys	Arg	Pro	Cys	Thr	Cys		
			420					425					430				
Asn	Pro	Ala	Gly	Ser	Leu	Asp	Thr	Cys	Asp	Pro	Arg	Ser	Gly	Arg	Cys		
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Pro	Cys	Lys	Glu	Asn	Val	Glu	Gly	Asn	Leu	Cys	Asp	Arg	Cys	Arg	Pro		
		450				455					460						
Gly	Thr	Phe	Asn	Leu	Gln	Pro	His	Asn	Pro	Ala	Gly	Cys	Ser	Ser	Cys		
465				470						475					480		
Phe	Cys	Tyr	Gly	His	Ser	Lys	Val	Cys	Ala	Ser	Thr	Ala	Gln	Phe	Gln		
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Val	His	His	Ile	Leu	Ser	Asp	Phe	His	Gln	Gly	Ala	Glu	Gly	Trp	Trp		
			500					505					510				
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		515					520					525					
Gly	Val	Leu	Leu	Ser	Pro	Glu	Asp	Glu	Glu	Glu	Leu	Thr	Ala	Pro	Gly		
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Lys	Phe	Leu	Gly	Asp	Gln	Arg	Phe	Ser	Tyr	Gly	Gln	Pro	Leu	Ile	Leu		
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Thr	Phe	Arg	Val	Pro	Pro	Gly	Asp	Ser	Pro	Leu	Pro	Val	Gln	Leu	Arg		
			565					570						575			
Leu	Glu	Gly	Thr	Gly	Leu	Ala	Leu	Ser	Leu	Arg	His	Ser	Ser	Leu	Ser		
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690	695	700
Val Pro Cys Thr Cys	Asn Gln His Gly Thr Cys	Asp Pro Asn Thr Gly
705	710	715
Ile Cys Val Cys Ser	His His Thr Glu Gly Pro	Ser Cys Glu Arg Cys
725	730	735
Leu Pro Gly Phe Tyr Gly	Asn Pro Phe Ala Gly	Gln Ala Asp Asp Cys
740	745	750
Gln Pro Cys Pro Cys Pro	Gly Gln Ser Ala Cys Thr	Thr Ile Pro Glu
755	760	765
Ser Gly Glu Val Val Cys	Thr His Cys Pro Pro	Gly Gln Arg Gly Arg
770	775	780
Arg Cys Glu Val Cys Asp	Asp Gly Phe Phe Gly	Asp Pro Leu Gly Leu
785	790	795
Phe Gly His Pro Gln Pro	Cys His Gln Cys Gln	Cys Ser Gly Asn Val
805	810	815
Asp Pro Asn Ala Val Gly	Asn Cys Asp Pro Leu	Ser Gly His Cys Leu
820	825	830
Arg Cys Leu His Asn Thr	Thr Thr Gly Asp His	Cys Glu His Cys Gln Glu
835	840	845
Gly Phe Tyr Gly Ser Ala	Leu Ala Pro Arg Pro	Ala Asp Lys Cys Met
850	855	860
Pro Cys Ser Cys His Pro	Gln Gly Ser Val Ser	Glu Gln Met Pro Cys
865	870	875
Asp Pro Val Thr Gly Gln	Cys Ser Cys Leu Pro	His Val Thr Ala Arg
885	890	895
Asp Cys Ser Arg Cys Tyr	Pro Gly Phe Phe Asp	Leu Gln Pro Gly Arg
900	905	910
Gly Cys Arg Ser Cys Lys	Cys His Pro Leu Gly	Ser Gln Glu Asp Gln
915	920	925
Cys His Pro Lys Thr Gly	Gln Cys Thr Cys Arg	Pro Gly Val Thr Gly
930	935	940
Gln Ala Cys Asp Arg Cys	Gln Leu Gly Phe Phe	Gly Ser Ser Ile Lys
945	950	955
Gly Cys Arg Ala Cys Arg	Cys Ser Pro Leu Gly	Ala Ala Ser Ala Gln
965	970	975
Cys His Tyr Asn Gly Thr	Cys Val Cys Arg Pro	Gly Phe Glu Gly Tyr
980	985	990
Lys Cys Asp Arg Cys His	Tyr Asn Phe Phe Leu	Thr Ala Asp Gly Thr
995	1000	1005
His Cys Gln Gln Cys Pro	Ser Cys Tyr Ala Leu	Val Lys Glu Glu Thr
1010	1015	1020
Ala Lys Leu Lys Ala Arg	Leu Thr Leu Thr Glu	Gly Trp Leu Gln Gly
1025	1030	1035
Ser Asp Cys Gly Ser Pro	Trp Gly Pro Leu Asp	Ile Leu Leu Gly Glu
1045	1050	1055
Ala Pro Arg Gly Asp Val	Tyr Gln Gly His His	Leu Leu Pro Gly Ala
1060	1065	1070
Arg Glu Ala Phe Leu Glu	Gln Met Met Gly Leu	Glu Gly Ala Val Lys
1075	1080	1085
Ala Ala Arg Glu Gln Leu	Gln Arg Leu Asn Lys	Gly Ala Arg Cys Ala
1090	1095	1100
Gln Ala Gly Ser Gln Lys	Thr Cys Thr Gln Leu	Ala Asp Leu Glu Ala
1105	1110	1115
Val Leu Glu Ser Ser Glu	Glu Glu Glu Ile Leu	His Ala Ala Ala Ile Leu

Ala	Ser	Leu	Glu	Ile	Pro	Gln	Glu	Gly	Pro	Ser	Gln	Pro	Thr	Lys	Trp
				1125					1130					1135	
Ser	His	Leu	Ala	Ile	Glu	Ala	Arg	Ala	Leu	Ala	Arg	Ser	His	Arg	Asp
				1140					1145					1150	
Thr	Ala	Thr	Lys	Ile	Ala	Ala	Thr	Ala	Trp	Arg	Ala	Leu	Leu	Ala	Ser
				1155					1160					1165	
Asn	Thr	Ser	Tyr	Ala	Leu	Leu	Trp	Asn	Leu	Leu	Glu	Gly	Arg	Val	Ala
				1170					1175					1180	
Leu	Glu	Thr	Gln	Arg	Asp	Leu	Glu	Asp	Arg	Tyr	Gln	Glu	Val	Gln	Ala
				1185					1190					1195	
Ala	Gln	Lys	Ala	Leu	Arg	Thr	Ala	Val	Ala	Glu	Val	Leu	Pro	Glu	Ala
				1205					1210					1215	
Glu	Ser	Val	Leu	Ala	Thr	Val	Arg	Gln	Val	Gly	Ala	Asp	Thr	Ala	Pro
				1220					1225					1230	
Tyr	Leu	Ala	Leu	Leu	Ala	Ser	Pro	Gly	Ala	Leu	Pro	Gln	Lys	Ser	Arg
				1235					1240					1245	
Ala	Glu	Asp	Leu	Gly	Leu	Lys	Ala	Lys	Ala	Leu	Glu	Lys	Thr	Val	Ala
				1250					1255					1260	
Ser	Trp	Gln	His	Met	Ala	Thr	Glu	Ala	Ala	Arg	Thr	Leu	Gln	Thr	Ala
				1265					1270					1275	
Ala	Gln	Ala	Thr	Leu	Arg	Gln	Thr	Glu	Pro	Leu	Thr	Met	Ala	Arg	Ser
				1285					1290					1295	
Arg	Leu	Thr	Ala	Thr	Phe	Ala	Ser	Gln	Leu	His	Gln	Glu	Ala	Arg	Ala
				1300					1305					1310	
Ala	Leu	Thr	Gln	Ala	Ser	Ser	Ser	Val	Gln	Ala	Ala	Thr	Val	Thr	Val
				1315					1320					1325	
Met	Gly	Ala	Arg	Thr	Leu	Leu	Ala	Asp	Leu	Glu	Gly	Met	Lys	Leu	Gln
				1330					1335					1340	
Phe	Pro	Arg	Pro	Lys	Asp	Gln	Ala	Ala	Leu	Gln	Arg	Lys	Ala	Asp	Ser
				1345					1350					1355	
Val	Ser	Asp	Arg	Leu	Leu	Ala	Asp	Thr	Arg	Lys	Lys	Thr	Lys	Gln	Ala
				1365					1370					1375	
Glu	Arg	Met	Leu	Gly	Asn	Ala	Ala	Pro	Leu	Ser	Ser	Ser	Ala	Lys	Lys
				1380					1385					1390	
Lys	Gly	Arg	Glu	Ala	Glu	Val	Leu	Ala	Lys	Asp	Ser	Ala	Lys	Leu	Ala
				1395					1400					1405	
Lys	Ala	Leu	Leu	Arg	Glu	Arg	Lys	Gln	Ala	His	Arg	Arg	Ala	Ser	Arg
				1410					1415					1420	
Leu	Thr	Ser	Gln	Thr	Gln	Ala	Thr	Leu	Gln	Gln	Ala	Ser	Gln	Gln	Val
				1425					1430					1435	
Leu	Ala	Ser	Glu	Ala	Arg	Arg	Gln	Glu	Leu	Glu	Glu	Ala	Glu	Arg	Val
				1445					1450					1455	
Gly	Ala	Gly	Leu	Ser	Glu	Met	Glu	Gln	Gln	Ile	Arg	Glu	Ser	Arg	Ile
				1460					1465					1470	
Ser	Leu	Glu	Lys	Asp	Ile	Glu	Thr	Leu	Ser	Glu	Leu	Leu	Ala	Arg	Leu
				1475					1480					1485	
Gly	Ser	Leu	Asp	Thr	His	Gln	Ala	Pro	Ala	Gln	Ala	Leu	Asn	Glu	Thr
				1490					1495					1500	
Gln	Trp	Ala	Leu	Glu	Arg	Leu	Arg	Leu	Gln	Leu	Gly	Ser	Pro	Gly	Ser
				1505					1510					1515	
Leu	Gln	Arg	Lys	Leu	Ser	Leu	Leu	Glu	Gln	Glu	Ser	Gln	Gln	Gln	Glu
				1525					1530					1535	
Leu	Gln	Ile	Gln	Gly	Phe	Glu	Ser	Asp	Leu	Ala	Glu	Ile	Arg	Ala	Asp
				1540					1545					1550	

1555 1560 1565
 Lys Gln Asn Leu Glu Ala Ile Leu His Ser Leu Pro Glu Asn Cys Ala
 1570 1575 1580
 Ser Trp Gln
 1585

 <210> 1363
 <211> 392
 <212> DNA
 <213> Homo sapiens

 <400> 1363
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 120
 ggaatctgcg aaaccgacaa agatgcggct gtttgagtgg atgtgaagga agatgcaggt
 180
 gtctcatcgg cggggccacc atgaacaacc cttcttgatg ccccgtaggt gacgcgctca
 240
 cacacgacat gcacaacaaa taaatcgcaa agcacagagg gacaatcgaa tacaccttga
 300
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 360
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 392

 <210> 1364
 <211> 104
 <212> PRT
 <213> Homo sapiens

 <400> 1364
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 20 25 30
 Cys Met Ser Cys Val Ser Ala Ser Pro Thr Gly His Gln Glu Gly Leu
 35 40 45
 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro
 50 55 60
 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu
 65 70 75 80
 Arg Ala Gln Arg Gly Phe Pro Leu Arg Pro Cys Leu Arg Trp Arg Leu
 85 90 95
 Arg Leu Gln Trp Arg Leu Tyr Pro
 100

 <210> 1365
 <211> 451
 <212> DNA
 <213> Homo sapiens

 <400> 1365

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 ctacagcggg ccctgggtca ggatcgccaa gaggcgcctt ggaatgaggt ggatgaggtc
 120
 tggcccaatg tcttcatagc tgagaagagt gtggctgtga acaaggggag gctgaagagg
 180
 ctgggaatca cccacattct gaatgctgcg catggcaccc gcgtttacac tggccccgaa
 240
 ttctacactg gcctggagat ccagtacctg ggtgtagagg tggatgactt tcctgaggtg
 300
 gacatttccc agcatttccg gaaggcgtct gagttcctgg atgagggcgt gctgacttac
 360
 agagggaaag tcctgggtcag cagcgaaatg ggcacagcc ggtcagcagt gctgggtggtc
 420
 gcctacctga tgatcttcca caacatggcc a
 451

<210> 1366

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1366

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Cys	Val	Leu	Asp	Leu	Gln	Arg	Ala	Leu	Val	Gln	Asp	Arg	Gln	Glu	Ala
			20					25					30		
Pro	Trp	Asn	Glu	Val	Asp	Glu	Val	Trp	Pro	Asn	Val	Phe	Ile	Ala	Glu
		35					40					45			
Lys	Ser	Val	Ala	Val	Asn	Lys	Gly	Arg	Leu	Lys	Arg	Leu	Gly	Ile	Thr
	50					55					60				
His	Ile	Leu	Asn	Ala	Ala	His	Gly	Thr	Gly	Val	Tyr	Thr	Gly	Pro	Glu
65					70					75				80	
Phe	Tyr	Thr	Gly	Leu	Glu	Ile	Gln	Tyr	Leu	Gly	Val	Glu	Val	Asp	Asp
			85						90					95	
Phe	Pro	Glu	Val	Asp	Ile	Ser	Gln	His	Phe	Arg	Lys	Ala	Ser	Glu	Phe
			100						105				110		
Leu	Asp	Glu	Ala	Leu	Leu	Thr	Tyr	Arg	Gly	Lys	Val	Leu	Val	Ser	Ser
		115						120				125			
Glu	Met	Gly	Ile	Ser	Arg	Ser	Ala	Val	Leu	Val	Val	Ala	Tyr	Leu	Met
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Ile	Phe	His	Asn	Met	Ala										
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<210> 1367

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1367

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 120

tcgtcgtcgc attgctgctg gtcacgcgtc cactgcccgt cagcgcactc gtcggccaga
 180
 gcttcttcga cgcgaaggc gccttcgtcg gcctcgccaa cttegtcgc tacctcgaca
 240
 acccgcacct ggtccagtc gccttcaaca gcctctggct ggccgcgac agcgccgtca
 300
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 330

<210> 1368

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1368

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Cys	Cys	Trp	Ser	Ser	Ser	His	Cys	Pro	Ser	Ala	His	Ser	Ser	Ala	Arg
			20					25					30		
Ala	Ser	Ser	Thr	Ala	Lys	Ala	Pro	Ser	Ser	Ala	Ser	Pro	Thr	Ser	Leu
			35				40					45			
Ala	Thr	Ser	Thr	Thr	Pro	Pro	Trp	Ser	Ser	Pro	Pro	Ser	Thr	Ala	Ser
	50					55				60					
Gly	Trp	Pro	Arg	Ser	Ala	Pro	Ser	Ser	Ala	Pro	Pro	Ser	Pro	Thr	Ser
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Thr	Arg														

<210> 1369

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1369

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 120
 cccctggacc cctacagcca ggagcagcgg gagcagctgc aggtcctacg ccaggctgcc
 180
 ttcgaggtgg agggggagtc ctcgggtgcc gggctaagtg ctgaccgtcg ccgttccttc
 240
 tgtgcccag agttccgcaa actgggcttt tctaacagca acccagcaca ggacctggag
 300
 cgcggtcccc ccggtctgct ggccctggac aacatgttgt acttctccag aaacgc
 356

<210> 1370

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1370

Met Gly Asp Glu Met Ala His His Leu Tyr Val Leu Gln Ala Leu Met

1				5					10					15			
Leu	Gly	Leu	Leu	Glu	Pro	Arg	Met	Arg	Thr	Pro	Leu	Asp	Pro	Tyr	Ser		
			20					25					30				
Gln	Glu	Gln	Arg	Glu	Gln	Leu	Gln	Val	Leu	Arg	Gln	Ala	Ala	Phe	Glu		
		35					40					45					
Val	Glu	Gly	Glu	Ser	Ser	Gly	Ala	Gly	Leu	Ser	Ala	Asp	Arg	Arg	Arg		
	50					55					60						
Ser	Leu	Cys	Ala	Arg	Glu	Phe	Arg	Lys	Leu	Gly	Phe	Ser	Asn	Ser	Asn		
65				70						75				80			
Pro	Ala	Gln	Asp	Leu	Glu	Arg	Val	Pro	Pro	Gly	Leu	Leu	Ala	Leu	Asp		
			85					90					95				
Asn	Met	Leu	Tyr	Phe	Ser	Arg	Asn										
			100														

<210> 1371

<211> 648

<212> DNA

<213> Homo sapiens

<400> 1371

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120
cttatagaga agacatgttc caagtaccct ctttcctttg tctgcttttc tcatgggtac
180
tttgccctct aagaagccta ctttcctctt ttccctctct cctctcccta tttctctttg
240
ttgagagagc agtcagatta acccaacaac tcttgaggatg ccttggtcac ctgagagcat
300
ggaaagtcca tgccttcacc agagtaatga ctaccatttc tccaaaactc tcctcatgcc
360
atccgatagg cagtattgat cagaagggga aatctagtgt gttaaaattg ataaaccagc
420
ttaagttata cctacaataa aagaccagc cttagcccat ggctgaatgt tgaatactgt
480
tgcattggaaa tttgggattt ctagttagag gctttataaa ggtagaatca tgcagacaca
540
tatacctgga aatattcgga acattctatt agcagaaatg caatgtagga agcttattgg
600
ttctagaaga atgtgtcatt gtcagtaatt ggaattactg acagatct
648

<210> 1372

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1372

Met	Phe	Gln	Val	Pro	Ser	Phe	Leu	Cys	Leu	Leu	Phe	Ser	Trp	Val	Leu		
1				5					10					15			
Cys	Pro	Leu	Arg	Ser	Leu	Leu	Ser	Ser	Phe	Pro	Leu	Leu	Leu	Ser	Leu		
		20					25				30						
Phe	Leu	Phe	Val	Glu	Arg	Ala	Val	Arg	Leu	Thr	Gln	Gln	Leu	Leu	Glu		


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      35              40              45
Cys Leu Gly His Leu Arg Ala Trp Lys Val His Ala Leu Thr Arg Val
  50              55              60
Met Thr Thr Ile Ser Pro Lys Leu Ser Ser Cys His Pro Ile Gly Ser
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Ile Asp Gln Lys Gly Lys Ser Ser Val Leu Lys Leu Ile Asn Gln Leu
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Lys Leu Tyr Leu Gln
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<210> 1373
 <211> 369
 <212> DNA
 <213> Homo sapiens

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<400> 1373
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<210> 1374
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 <212> PRT
 <213> Homo sapiens

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      20              25              30
Glu Leu Phe Val Arg Cys Thr Thr Glu Asn Leu Ala Asp Gln Asn Pro
      35              40              45
Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
      50              55              60
Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
65              70              75              80
Cys Ala Gly Leu Leu Lys Val Leu Thr Gln Ala Ser Glu Val Asn Pro
      85              90              95
Leu Arg

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<210> 1375
 <211> 282

<212> DNA

<213> Homo sapiens

<400> 1375

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282

<210> 1376

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1376

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Phe	His	Leu	His	Gly	Trp	His	Trp	Pro	Ala	Phe	Asn	Ile	Ala	Asp	Met
		20					25					30			
Ala	Ile	Val	Gly	Gly	Ala	Ile	Ala	Leu	Val	Ala	Gln	Ser	Phe	Met	Ser
		35				40						45			
Val	Glu	Asn	Pro	Ala	Ala	Thr	Lys	Glu	Ser	Gln					
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<210> 1377

<211> 6306

<212> DNA

<213> Homo sapiens

<400> 1377

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<210> 1378

<211> 798

<212> PRT

<213> Homo sapiens

<400> 1378

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			20					25					30		
Leu	Pro	Glu	Leu	Asp	Leu	Ser	Glu	Leu	Asp	Val	Asn	Asp	Leu	Asp	Thr
			35					40					45		
Asp	Ser	Phe	Leu	Gly	Gly	Leu	Lys	Trp	Cys	Ser	Asp	Gln	Ser	Glu	Ile
			50					55				60			
Ile	Ser	Asn	Gln	Tyr	Asn	Asn	Glu	Pro	Ser	Asn	Ile	Phe	Glu	Lys	Ile
65					70					75				80	
Asp	Glu	Glu	Asn	Glu	Ala	Asn	Leu	Leu	Ala	Val	Leu	Thr	Glu	Thr	Leu
			85					90					95		
Asp	Ser	Leu	Pro	Val	Asp	Glu	Asp	Gly	Leu	Pro	Ser	Phe	Asp	Ala	Leu
			100					105					110		
Thr	Asp	Gly	Asp	Val	Thr	Thr	Asp	Asn	Glu	Ala	Ser	Pro	Ser	Ser	Met

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Pro Asp Gly Thr Pro Pro Pro Gln Glu Ala Glu Glu Pro Ser Leu Leu		
130	135	140
Lys Lys Leu Leu Leu Ala Pro Ala Asn Thr Gln Leu Ser Tyr Asn Glu		
145	150	155
Cys Ser Gly Leu Ser Thr Gln Asn His Ala Asn His Asn His Arg Ile		
165	170	175
Arg Thr Asn Pro Ala Ile Val Lys Thr Glu Asn Ser Trp Ser Asn Lys		
180	185	190
Ala Lys Ser Ile Cys Gln Gln Gln Lys Pro Gln Arg Arg Pro Cys Ser		
195	200	205
Glu Leu Leu Lys Tyr Leu Thr Thr Asn Asp Asp Pro Pro His Thr Lys		
210	215	220
Pro Thr Glu Asn Arg Asn Ser Ser Arg Asp Lys Cys Thr Ser Lys Lys		
225	230	235
Lys Ser His Thr Gln Ser Gln Ser Gln His Leu Gln Ala Lys Pro Thr		
245	250	255
Thr Leu Ser Leu Pro Leu Thr Pro Glu Ser Pro Asn Asp Pro Lys Gly		
260	265	270
Ser Pro Phe Glu Asn Lys Thr Ile Glu Arg Thr Leu Ser Val Glu Leu		
275	280	285
Ser Gly Thr Ala Gly Leu Thr Pro Pro Thr Thr Pro Pro His Lys Ala		
290	295	300
Asn Gln Asp Asn Pro Phe Arg Ala Ser Pro Lys Leu Lys Ser Ser Cys		
305	310	315
Lys Thr Val Val Pro Pro Pro Ser Lys Lys Pro Arg Tyr Ser Glu Ser		
325	330	335
Ser Gly Thr Gln Gly Asn Asn Ser Thr Lys Lys Gly Pro Glu Gln Ser		
340	345	350
Glu Leu Tyr Ala Gln Leu Ser Lys Ser Ser Val Leu Thr Gly Gly His		
355	360	365
Glu Glu Arg Lys Thr Lys Arg Pro Ser Leu Arg Leu Phe Gly Asp His		
370	375	380
Asp Tyr Cys Gln Ser Ile Asn Ser Lys Thr Glu Ile Leu Ile Asn Ile		
385	390	395
Ser Gln Glu Leu Gln Asp Ser Arg Gln Leu Glu Asn Lys Asp Val Ser		
405	410	415
Ser Asp Trp Gln Gly Gln Ile Cys Ser Ser Thr Asp Ser Asp Gln Cys		
420	425	430
Tyr Leu Arg Glu Thr Leu Glu Ala Ser Lys Gln Val Ser Pro Cys Ser		
435	440	445
Thr Arg Lys Gln Leu Gln Asp Gln Glu Ile Arg Ala Glu Leu Asn Lys		
450	455	460
His Phe Gly His Pro Ser Gln Ala Val Phe Asp Asp Glu Ala Asp Lys		
465	470	475
Thr Gly Glu Leu Arg Asp Ser Asp Phe Ser Asn Glu Gln Phe Ser Lys		
485	490	495
Leu Pro Met Phe Ile Asn Ser Gly Leu Ala Met Asp Gly Leu Phe Asp		
500	505	510
Asp Ser Glu Asp Glu Ser Asp Lys Leu Ser Tyr Pro Trp Asp Gly Thr		
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Gln Ser Tyr Ser Leu Phe Asn Val Ser Pro Ser Cys Ser Ser Phe Asn		
530	535	540
Ser Pro Cys Arg Asp Ser Val Ser Pro Pro Lys Ser Leu Phe Ser Gln		

545					550					555					560
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			580							585				590	
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Gln	His	Glu	Arg	Leu	Lys	Arg	Glu	Glu	Tyr	Arg	Arg	Glu	Tyr	Glu	Lys
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Arg	Glu	Ser	Glu	Arg	Ala	Lys	Gln	Arg	Glu	Arg	Gln	Arg	Gln	Lys	Ala
			660						665					670	
Ile	Glu	Glu	Arg	Arg	Val	Ile	Tyr	Val	Gly	Lys	Ile	Arg	Pro	Asp	Thr
			675				680							685	
Thr	Arg	Thr	Glu	Leu	Arg	Asp	Arg	Phe	Glu	Val	Phe	Gly	Glu	Ile	Glu
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Glu	Cys	Thr	Val	Asn	Leu	Arg	Asp	Asp	Gly	Asp	Ser	Tyr	Gly	Phe	Ile
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Thr	Tyr	Arg	Tyr	Thr	Cys	Asp	Ala	Phe	Ala	Ala	Leu	Glu	Asn	Gly	Tyr
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Thr	Leu	Arg	Arg	Ser	Asn	Glu	Thr	Asp	Phe	Glu	Leu	Tyr	Phe	Cys	Gly
			740						745					750	
Arg	Lys	Gln	Phe	Phe	Lys	Ser	Asn	Tyr	Ala	Asp	Leu	Asp	Ser	Asn	Ser
			755					760					765		
Asp	Asp	Phe	Asp	Pro	Ala	Ser	Thr	Lys	Ser	Lys	Tyr	Asp	Ser	Leu	Asp
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<210> 1379

<211> 590

<212> DNA

<213> Homo sapiens

<400> 1379

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<211> 141
<212> PRT
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Cys Pro Cys Arg Val Ala Ala Ser Pro Ile Ser Ala Leu Gly Val Pro
35 40 45
Ala Leu Trp Pro Arg His Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys
50 55 60
Gly Arg Val Xaa Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys Gly Arg
65 70 75 80
Val Xaa Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa
85 90 95
Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa Pro Pro
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<211> 433
<212> DNA
<213> Homo sapiens

<400> 1381
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<210> 1382

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1382

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Gly Arg Ser Thr Leu Thr Ala Leu Ala Lys His Ser Phe Pro Cys Pro
      35             40             45
Gly Cys His Gln Arg Gly Gly Arg Ser His Arg Ser Ala Leu Val Ser
      50             55             60
Ala Gly Leu Lys Trp Gly Phe Ser Phe Cys Val Glu Gln Phe Ile Arg
65             70             75             80
Gly Leu Ile Ser Lys Pro Arg His Trp Pro Cys Thr Cys Ser Ser Arg
      85             90             95
Lys Pro Asn Ser Cys Leu Trp Ala Pro Ala Tyr Arg Gln Pro Asn Gly
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Leu Ala Pro Ala Lys Gly Leu Phe Gly Asp Leu
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<210> 1383

<211> 906

<212> DNA

<213> Homo sapiens

<400> 1383

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 <212> PRT
 <213> Homo sapiens

<400> 1384
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 35 40 45
 Thr Ala Ser Ser Leu Leu Pro Leu Thr Asn Thr Pro Gln Thr Pro His
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 Met Ser Ser Pro Thr Pro Pro Arg Ala Met Val Leu Thr Lys Gln Arg
 65 70 75 80
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<210> 1385
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<210> 1386
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1386
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 20 25 30
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<210> 1387
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<210> 1388
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1388
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 Ser Pro Gly Gly Gln His Thr Glu Ala Gly Glu Asp Glu Gly Val Val
 35 40 45
 Ala Ala Asp Gly Ser Ser Asp Ser Thr Ala Gly Asp Gly Gly Lys Glu
 50 55 60
 Ser Glu Asp Glu Asp Ser Asp Arg Gly Gly Glu His Arg Cys Ser Phe
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<210> 1389
 <211> 4013

<212> DNA

<213> Homo sapiens

<400> 1389

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<210> 1390

<211> 1156

<212> PRT

<213> Homo sapiens

<400> 1390

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Thr	Ile	Ile	Ser	Thr	Ile	Pro	Ser	Thr	Ala	Met	His	Thr	Arg	Ser	Thr
		35					40				45				
Ala	Ala	Pro	Ile	Pro	Ile	Leu	Pro	Glu	Arg	Gly	Val	Ser	Leu	Phe	Pro
		50				55				60					
Tyr	Gly	Ala	Asp	Ala	Gly	Asp	Leu	Glu	Phe	Val	Arg	Arg	Thr	Val	Asp
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Phe	Thr	Ser	Pro	Leu	Phe	Lys	Pro	Ala	Thr	Gly	Phe	Pro	Leu	Gly	Ser
			85					90					95		
Ser	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Thr	Asp	Asn	Gly	Gln	Ile	Ile	Phe
			100					105					110		
Pro	Glu	Ser	Asp	Tyr	Gln	Ile	Phe	Ser	Tyr	Pro	Asn	Pro	Leu	Pro	Thr
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Gly	Phe	Thr	Gly	Arg	Asp	Pro	Val	Ala	Leu	Val	Ala	Pro	Phe	Trp	Asp

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Asp	Ala	Asp	Phe	Ser	Thr	Gly	Arg	Gly	Thr	Thr	Phe	Tyr	Gln	Glu	Tyr
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Glu	Thr	Phe	Tyr	Gly	Glu	His	Ser	Leu	Leu	Val	Gln	Gln	Ala	Glu	Ser
				165						170					175
Trp	Ile	Arg	Lys	Ile	Thr	Asn	Asn	Gly	Gly	Tyr	Lys	Ala	Arg	Trp	Ala
			180					185					190		
Leu	Lys	Val	Thr	Trp	Val	Asn	Ala	His	Ala	Tyr	Pro	Ala	Gln	Trp	Thr
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Leu	Gly	Ser	Asn	Thr	Tyr	Gln	Ala	Ile	Leu	Ser	Thr	Asp	Gly	Ser	Arg
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Ser	Tyr	Ala	Leu	Phe	Leu	Tyr	Gln	Ser	Gly	Gly	Met	Gln	Trp	Asp	Val
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Gly	Tyr	Phe	Glu	Asn	Ser	Pro	Leu	Met	Ser	Gln	Pro	Val	Trp	Glu	Arg
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Tyr	Arg	Pro	Asp	Arg	Phe	Leu	Asn	Ser	Asn	Ser	Gly	Leu	Gln	Gly	Leu
		275					280					285			
Gln	Phe	Tyr	Arg	Leu	His	Arg	Glu	Glu	Arg	Pro	Asn	Tyr	Arg	Leu	Glu
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Cys	Leu	Gln	Trp	Leu	Lys	Ser	Gln	Pro	Arg	Trp	Pro	Ser	Trp	Gly	Trp
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Asn	Gln	Val	Ser	Cys	Pro	Cys	Ser	Trp	Gln	Gln	Gly	Arg	Arg	Asp	Leu
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Arg	Phe	Gln	Pro	Val	Ser	Ile	Gly	Arg	Trp	Gly	Leu	Gly	Ser	Arg	Gln
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Leu	Cys	Ser	Phe	Thr	Ser	Trp	Arg	Gly	Gly	Val	Cys	Cys	Ser	Tyr	Gly
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Pro	Trp	Gly	Glu	Phe	Arg	Glu	Gly	Trp	His	Val	Gln	Arg	Pro	Trp	Gln
	370					375					380				
Leu	Ala	Gln	Glu	Leu	Glu	Pro	Gln	Ser	Trp	Cys	Cys	Arg	Trp	Asn	Asp
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Lys	Pro	Tyr	Leu	Cys	Ala	Leu	Tyr	Gln	Gln	Arg	Arg	Pro	His	Val	Gly
				405					410					415	
Cys	Ala	Thr	Tyr	Arg	Pro	Pro	Gln	Pro	Ala	Trp	Met	Phe	Gly	Asp	Pro
			420					425					430		
His	Ile	Thr	Thr	Leu	Asp	Gly	Val	Ser	Tyr	Thr	Phe	Asn	Gly	Leu	Gly
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Asp	Phe	Leu	Leu	Val	Gly	Ala	Gln	Asp	Gly	Asn	Ser	Ser	Phe	Leu	Leu
	450					455					460				
Gln	Gly	Arg	Thr	Ala	Gln	Thr	Gly	Ser	Ala	Gln	Ala	Thr	Asn	Phe	Ile
465					470					475					480
Ala	Phe	Ala	Ala	Gln	Tyr	Arg	Ser	Ser	Ser	Leu	Gly	Pro	Val	Thr	Val
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					565					570					575
Thr	Glu	Gly	Leu	Leu	Gly	Val	Trp	Asn	Asn	Asn	Pro	Glu	Asp	Asp	Phe
			580					585					590		
Arg	Met	Pro	Asn	Gly	Ser	Thr	Ile	Pro	Pro	Gly	Ser	Pro	Glu	Glu	Met
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Leu	Phe	His	Phe	Gly	Met	Thr	Trp	Gln	Ile	Asn	Gly	Thr	Gly	Leu	Leu
	610					615					620				
Gly	Lys	Arg	Asn	Asp	Gln	Leu	Pro	Ser	Asn	Phe	Thr	Pro	Val	Phe	Tyr
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Ser	Gln	Leu	Gln	Lys	Asn	Ser	Ser	Trp	Ala	Glu	His	Leu	Ile	Ser	Asn
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Asn	Ala	Glu	Asp	Ala	Asn	Phe	Thr	Leu	Arg	Asp	Ser	Cys	Thr	Asp	Leu
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Glu	Leu	Phe	Glu	Asn	Gly	Thr	Leu	Leu	Trp	Thr	Pro	Lys	Ser	Leu	Glu
			740					745					750		
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			805						810					815	
Gly	Ser	Glu	Asp	Ala	Cys	Glu	Glu	Pro	Cys	Phe	Pro	Ser	Val	His	Cys
			820					825					830		
Val	Pro	Gly	Lys	Gly	Cys	Glu	Ala	Cys	Pro	Pro	Asn	Leu	Thr	Gly	Asp
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Gly	Arg	His	Cys	Ala	Ala	Leu	Gly	Ser	Ser	Phe	Leu	Cys	Gln	Asn	Gln
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Ser	Cys	Pro	Val	Asn	Tyr	Cys	Tyr	Asn	Gln	Gly	His	Cys	Tyr	Ile	Ser
865					870					875					880
Gln	Thr	Leu	Gly	Cys	Gln	Pro	Met	Cys	Thr	Cys	Pro	Pro	Ala	Phe	Thr
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Asp	Ser	Arg	Cys	Phe	Leu	Ala	Gly	Asn	Asn	Phe	Ser	Pro	Thr	Val	Asn
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Pro Arg Arg Ser Glu Glu Pro Arg Asn Asp Val Val Phe Gln Pro Ile
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Ser Gly Glu Asp Val Arg Asp Val Thr Ala Leu Asn Val Ser Thr Leu
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Lys Ala Tyr Phe Arg Cys Asp Gly Tyr Lys Gly Tyr Asp Leu Val Tyr
          1045              1050              1055
Ser Pro Gln Ser Gly Phe Thr Cys Val Ser Pro Cys Ser Arg Gly Tyr
          1060              1065              1070
Cys Asp His Gly Gly Gln Cys Gln His Leu Pro Ser Gly Pro Arg Cys
  1075              1080              1085
Ser Cys Val Ser Phe Ser Ile Tyr Thr Ala Trp Gly Glu His Cys Glu
  1090              1095              1100
His Leu Ser Met Lys Leu Asp Ala Phe Phe Gly Ile Phe Phe Gly Ala
  1105              1110              1115              1120
Leu Gly Gly Leu Leu Leu Leu Gly Val Gly Thr Phe Val Val Leu Arg
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<210> 1391
<211> 481
<212> DNA
<213> Homo sapiens

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<210> 1392
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<212> PRT
<213> Homo sapiens

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<400> 1392
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      20             25             30
Leu Thr Val Leu Glu Asn Val Met Leu Ala Pro Arg Lys Val Leu Gly
      35             40             45
Lys Ser Lys Gln Lys Ala Glu Glu Leu Ala Val Arg Gln Leu Thr His
      50             55             60
Val Gly Leu Ser Asp Lys Leu Lys Thr Phe Pro Ala Xaa Leu Ser Gly
      65             70             75             80
Gly Gln Gln Gln Arg Met Ala Ile Ala Arg Ala Leu Ala Met Ser Pro
      85             90             95
Asp Tyr Met Leu Phe Asp Glu Ala Thr Ser Ala Leu Asp Pro Gln Leu
      100            105            110
Val Gly Glu Val Leu Asp Thr Met Arg Met Leu Ala Glu Asp Gly Met
      115            120            125
Thr Met Val Leu Val Thr His Glu Ile Arg Phe Ala Arg Asp Val Ser
      130            135            140
Asp Arg Val Ala Phe Phe Arg Asn Gly Leu Val His Glu Ile Gly Ala
      145            150            155            160

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<210> 1393

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1393

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cggccgccat cggcgcgggc cttgtgggat atggccatta ctgaggtgct ggccggctac
60
tacgaacccg acgaacacgg acaccgaag cccgagtcgt tgtacggcgc ggtcaagatg
120
tgggcccttc tgcgcgctca gggcatcagg tggcccgtg cancgggtgga gcgcctcatg
180
cgggacaacc ggtggcgtgg ggtgaccgc cgtaagaagg ttncgcacca ccatcgctga
240
cccggctgcc gggcgagccc cggatctggt ggaccgccag ttccgcgtcg aggcgcccac
300
caagttgct
309

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<210> 1394

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1394

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Arg Pro Pro Ser Ala Arg Ala Leu Trp Asp Met Ala Ile Thr Glu Val
      1             5             10             15
Leu Ala Gly Tyr Tyr Glu Pro Asp Glu His Gly His Arg Lys Pro Glu
      20             25             30
Ser Leu Tyr Gly Ala Val Lys Met Trp Ala Leu Leu Arg Arg Gln Gly
      35             40             45
Ile Arg Trp Pro Ala Ala Xaa Val Glu Arg Leu Met Arg Asp Asn Arg
      50             55             60
Trp Arg Gly Val Thr Arg Arg Lys Lys Val Xaa His His His Arg

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65

70

75

<210> 1395
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 1395
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 60
 tatgacggta gtcgtgggcg aaacgggtgct tgtcgttgtg cgccgtcaac gtcgaagagc
 120
 ccagattctt aaaggcggtc gcgatgttgc ccgggcgaca agggccttgg ctggacgggt
 180
 gtcggtgggg gagatcccct cagttgcact agagcacgtg gccgatgacg tggaggtatt
 240
 ggctcaggct aggcggggtc atgcagtggg cggaagcgtt tccgacgccc tcattgccac
 300
 ctcccgcaaa ccagggatgg ctggtctggt gccactagcc cacgcgt
 347

<210> 1396
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1396
 Met Thr Val Val Val Gly Glu Thr Val Leu Val Val Val Arg Arg Gln
 1 5 10 15
 Arg Arg Arg Ala Gln Ile Leu Lys Gly Gly Arg Asp Val Ala Arg Ala
 20 25 30
 Thr Arg Ala Leu Ala Gly Arg Val Ser Val Gly Glu Ile Pro Ser Val
 35 40 45
 Ala Leu Glu His Val Ala Asp Asp Val Glu Val Leu Ala Gln Ala Arg
 50 55 60
 Arg Ala His Ala Val Gly Gly Ser Val Ser Asp Ala Leu Ile Ala Thr
 65 70 75 80
 Ser Arg Gln Pro Gly Met Ala Gly Leu Val Pro Leu Ala His Ala
 85 90 95

<210> 1397
 <211> 308
 <212> DNA
 <213> Homo sapiens

<400> 1397
 caattgcgcg gggttactgca ggcgaagatg cagatgatgt cggacaccaa tttcctcgac
 60
 ctggccccgcg tcgcgattgc cgccactatc cattctccgg aacgcgcgca agacatggtc
 120
 aaccgcttga gcaaacgcga agaaggcttc acgcaatggg tacgtgccgc acaggacgat
 180
 ggctcgactgt cctgcagcga cccggcgctt gctgcccacc agatacaaag cctgctcaag
 240

gcgttcgcct tttggccgca aatcacccctg ggccagccgg tgctggatgc cgccagccag
 300
 gccaacgt
 308

<210> 1398
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1398
 Met Gln Met Met Ser Asp Thr Asn Phe Leu Asp Leu Ala Arg Val Ala
 1 5 10 15
 Ile Ala Ala Thr Ile His Ser Pro Glu Arg Ala Gln Asp Met Val Asn
 20 25 30
 Arg Leu Ser Lys Arg Glu Glu Gly Phe Thr Gln Trp Val Arg Ala Ala
 35 40 45
 Gln Asp Asp Gly Arg Leu Ser Cys Ser Asp Pro Ala Phe Ala Ala His
 50 55 60
 Gln Ile Gln Ser Leu Leu Lys Ala Phe Ala Phe Trp Pro Gln Ile Thr
 65 70 75 80
 Leu Gly Gln Pro Val Leu Asp Ala Ala Ser Gln Ala Asn
 85 90

<210> 1399
 <211> 539
 <212> DNA
 <213> Homo sapiens

<400> 1399
 gctagctaac atttattttt gtttttatta ttgttatcta gtggtaaaaa tttcttaagc
 60
 aatgaactga agtctagatt tttgagatgt agtcctttac tgattataaa gcaaatgcct
 120
 ttagatatatt taacttcattc agtactatct gtagtaggag gctgatttta ctaaaattag
 180
 ataattatat acatctgttc ctatttccttt ggtaggacct ttaagaaagt catgctgaat
 240
 ctgagaatgc caggacattt cacgtggat gaatgtagga tttcattta cacatcgctg
 300
 cacagacagc ctctatataa cccaccctgt tgggggtattg aattttttct tttcccgccc
 360
 tactttttaa tcttgatcatg taatttcaac acataatttg tggcacttta gtttttttac
 420
 cttttatagt ttaataactt atacatgtac atgcttaaaa tgtcaaacaa tacaaatggg
 480
 aacaaagaaa attgcttcac catctgtgaa cccctccttt tgtagtcccc ttcacgcgt
 539

<210> 1400
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1400

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Met Asn Val Gly Tyr Ser Phe Thr His Arg Cys Thr Asp Ser Leu Tyr
 1              5              10              15
Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Phe Ser Arg Pro Thr
      20              25              30
Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
      35              40              45
Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
      50              55              60
Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
65              70              75              80
Asn Pro Ser Phe Cys Ser Pro Leu His Ala
      85              90

```

<210> 1401

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1401

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ttcgaggggt cacttggtact caagcttcgc gaagtccggg acctcggacg accgattttt
60
cggctgtgca ccgtcaccgc aaggctggcg tgggttnnct catcaccggc gcggcgatgg
120
ncattgggggt ttgatggccg cgtttccctg ctgctggggcg cgatcctcat cgtcaccggc
180
ccaacggtga ttaaccgat cctgcgtcag ttgcgtccta cccggcgagt gagtgtctctg
240
ttgaggtggg aaggaatcgt cgtcgatccg ctgggcgcca tcctggcatt actggtgtat
300
caggccataa ccagcatcga ccgatcttcc atcggacaag gcgtcttgaa tctggggctc
360
accctattgg tcgggctgct cttecgctggc cccatcgggt ggatcgtcac cgcatgatg
420
aaacggcacc tcatcccgga cttectacaa ggcgtgattt tcgttgggggt cgccgttggg
480
acgtgtgttg gcgctaactg cattcggggag gaatcggggc tggtcgccgt tacgatgctc
540
ggcatctacc tggcgaacca gcgcaacctc gagcttgagc ccgtcatcga gttcaaggaa
600
cacctgcagg tgctcctcgt tggcgctcta ttcatcatgc ttgcaggacg cgt
653

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<210> 1402

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1402

```

Phe Glu Gly Ser Leu Gly Leu Lys Leu Arg Glu Val Arg Asp Leu Gly
 1              5              10              15
Arg Pro Ile Phe Arg Leu Cys Thr Val Thr Ala Arg Leu Ala Trp Val
      20              25              30
Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

```


35	40	45
Ser Leu Leu Gly Ala Ile Leu Ile Val Thr Gly Pro Thr Val Ile		
50	55	60
Asn Pro Ile Leu Arg Gln Leu Arg Pro Thr Arg Val Ser Ala Leu		
65	70	75
Leu Arg Trp Glu Gly Ile Val Val Asp Pro Leu Gly Ala Ile Leu Ala		
85	90	95
Leu Leu Val Tyr Gln Ala Ile Thr Ser Ile Asp Arg Ser Ser Ile Gly		
100	105	110
Gln Gly Val Leu Asn Leu Gly Leu Thr Leu Leu Val Gly Leu Leu Phe		
115	120	125
Ala Gly Pro Ile Gly Trp Ile Val Thr Ala Met Met Lys Arg His Leu		
130	135	140
Ile Pro Asp Phe Leu Gln Gly Val Ile Phe Val Gly Val Ala Val Gly		
145	150	155
Thr Cys Val Gly Ala Asn Val Ile Arg Glu Glu Ser Gly Leu Val Ala		
165	170	175
Val Thr Met Leu Gly Ile Tyr Leu Ala Asn Gln Arg Asn Leu Glu Leu		
180	185	190
Glu Pro Val Ile Glu Phe Lys Glu His Leu Gln Val Leu Leu Val Gly		
195	200	205
Val Leu Phe Ile Met Leu Ala Gly Arg		
210	215	

<210> 1403

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1403

aagctttgca gtttcttggt atccaaatcc aggcgttctt ggtctttttc cacaacagtg
60

tgtgccacat gaaatggaac acgggcaaac atatctgatac caggaaacat tagccaagta
120

tgttccttgg ggtcatgatac tccacaagtt gggcatatct cctttatcag ctgcttgcca
180

gagcttcctt ccattctctt cattatgacc tcaaaggag atggcacgct agtcttgga
240

gtcctagctt gtttccgaag ggctgtcaga gcctccctgt taccatttct tatcttatca
300

ttttccacca actgatgtct agccagaaga actttttctg catcagtctc aatatcaacc
360

agagcctctt gaagctgctt catgttgga tcc
393

<210> 1404

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1404

Met Lys Gln Leu Gln Glu Ala Leu Val Asp Ile Glu Thr Asp Ala Glu
1 5 10 15

Lys Val Leu Leu Ala Arg His Gln Leu Val Glu Asn Asp Lys Ile Arg

20								25					30						
Asn	Gly	Asn	Arg	Glu	Ala	Leu	Thr	Ala	Leu	Arg	Lys	Gln	Ala	Arg	Thr				
35				40				45											
Ser	Lys	Thr	Ser	Val	Pro	Ser	Pro	Phe	Glu	Val	Ile	Met	Lys	Glu	Met				
50				55				60											
Glu	Gly	Ser	Ser	Gly	Lys	Gln	Leu	Ile	Lys	Glu	Ile	Cys	Pro	Thr	Cys				
65					70					75					80				
Gly	Asp	His	Asp	Pro	Lys	Glu	His	Thr	Trp	Leu	Met	Phe	Pro	Gly	Ser				
85				90				95											
Asp	Met	Phe	Ala	Arg	Val	Pro	Phe	His	Val	Ala	His	Thr	Val	Val	Glu				
100				105				110											
Lys	Asp	Gln	Glu	Arg	Leu	Asp	Leu	Asp	Thr	Lys	Lys	Leu	Gln	Ser					
115				120				125											

<210> 1405

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1405

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nncgcactgc acaaggccct gggcatcgaa ctgcccggcg cactgcaggt catcgtcaaa
60
ggcgaaacca gcttgcaatg gctcggcccc gagcaatggc tgctgatcgt gcccagcggt
120
gaagagttcg ccgccgagca aaacctgcgt gccgccctgg gcgagttgca tatccaggtc
180
gtcaacgtca gcggtggcca gcagatcctc gaactcagcg gcccgaaact gcgcgacgtg
240
ctgatgaaat ccaccagcta cgacgtacac cccaacaact tcccgggtggg caaggcggtg
300
ggcacggtgt tcgccaaagtc gcaactggtg atccgccata ccgccgaaga cacctgggaa
360
ctgctgatcc gtcgcagctt ctcggattac tgggtggctgt ggttgcagga cgcggctgca
420
t
421

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<210> 1406

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1406

Xaa	Arg	Leu	His	Lys	Ala	Leu	Gly	Ile	Glu	Leu	Pro	Gly	Ala	Leu	Gln
1				5					10					15	
Val	Ile	Val	Lys	Gly	Glu	Thr	Ser	Leu	Gln	Trp	Leu	Gly	Pro	Asp	Glu
			20				25						30		
Trp	Leu	Leu	Ile	Val	Pro	Ser	Gly	Glu	Glu	Phe	Ala	Ala	Glu	Gln	Asn
		35				40					45				
Leu	Arg	Ala	Ala	Leu	Gly	Glu	Leu	His	Ile	Gln	Val	Val	Asn	Val	Ser
	50				55					60					
Gly	Gly	Gln	Gln	Ile	Leu	Glu	Leu	Ser	Gly	Pro	Asn	Val	Arg	Asp	Val
65				70					75					80	
Leu	Met	Lys	Ser	Thr	Ser	Tyr	Asp	Val	His	Pro	Asn	Asn	Phe	Pro	Val

				85				90				95			
Gly	Lys	Ala	Val	Gly	Thr	Val	Phe	Ala	Lys	Ser	Gln	Leu	Val	Ile	Arg
100				105				110							
His	Thr	Ala	Glu	Asp	Thr	Trp	Glu	Leu	Leu	Ile	Arg	Arg	Ser	Phe	Ser
115				120				125							
Asp	Tyr	Trp	Trp	Leu	Trp	Leu	Gln	Asp	Ala	Ala	Ala				
130				135				140							

<210> 1407

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 1407

nncggccggg agaagctgga gctcgctctg tctaacctgc aggcagacgt cctggagttg
60
ctgctggagt ttgtctacac gggctccctg gtcatcgact cggccaacgc caagacactg
120
ctggaggcgg ccagcaagtt ccagttccac accttctgca aagtctgcgt gtcctttctt
180
gagaagcagc tgacggccag caactgcctg ggcgttgctg ccatggccga ggccatgcag
240
tgcagcgagc tctaccacat ngccaaggcc ttcgcgctgc agatcttccc cgaggtggcc
300
gcccaggagg agatcctcag catctccaag gacgacttca tcgcctacgt ctccaacgac
360
agcctcaaca ccaaggctga ggagctggtg tacgagacag tcatcaagtg gatcaagaag
420
gaccccgcgga cacgcacaca gtacgcggct gagctcctgg ccgtgggtccg cctccccttc
480
atccacccca gctacctgct caatgtggtt gacaatgaag agctgatcaa gtcatcagaa
540
gcctgccggg acctggtgaa cgaggccaaa cgctaccata tgctgccccca cgcccgccag
600
gagatgcaga cgcgccgaac ccggccgcgc ctctctgcag gtgtggctga ggtcatcgtc
660
ttggttgggg gccgtcagat ggtggggatg acccagcgct cgctgggtggc cgtcacctgc
720
tggaacccgc agaacaacaa gtggtacccc ttggcctcgg tgcccttttt aggcccgga
780
ttcttcagtg tagtgagtgc aggggccaac atctacctct caggtgggat ggaatcaggg
840
gtgccgctgg ctgatgtctg gtgctacatg tccctgcttg ataactggaa cctcgtctcc
900
agaatgccag tcccccgctg tcggcccat agcctcgtct acgatgggaa gatttacacc
960
ctcggggggac ttggcgtggc aggcaacgtg gaccacgtgg agagga
1006

<210> 1408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 1408

Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
 1 5 10 15
 Val Leu Glu Leu Leu Glu Phe Val Tyr Thr Gly Ser Leu Val Ile
 20 25 30
 Asp Ser Ala Asn Ala Lys Thr Leu Leu Glu Ala Ala Ser Lys Phe Gln
 35 40 45
 Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
 50 55 60
 Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
 65 70 75 80
 Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
 85 90 95
 Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
 100 105 110
 Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
 115 120 125
 Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
 130 135 140
 Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
 145 150 155 160
 Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
 165 170 175
 Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
 180 185 190
 His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
 195 200 205
 Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
 210 215 220
 Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
 225 230 235 240
 Trp Asn Pro Gln Asn Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
 245 250 255
 Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
 260 265 270
 Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
 275 280 285
 Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
 290 295 300
 Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
 305 310 315 320
 Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
 325 330 335

<210> 1409

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1409

nnnatgaagt tcttggtttt ttcagaaaaa cgcgcttttt gctatgctgg ccgccccgcg
 60
 gcacgagata gcaccatgca actgatcgat atcggcgta acctgaccaa cagcagtttc
 120

cacgaccaac aggccgcaat cgtcgagcgc gcgctggagg ccggcggttac gcaaattgctg
 180
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgcca tcaactggat
 240
 gcaagcggcg cccacctgtt cgccacggcc ggcgtgcac
 279

<210> 1410

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1410

Xaa	Met	Lys	Phe	Leu	Val	Phe	Ser	Glu	Lys	Arg	Ala	Phe	Cys	Tyr	Ala
1				5					10					15	
Gly	Arg	Pro	Ala	Ala	Arg	Asp	Ser	Thr	Met	Gln	Leu	Ile	Asp	Ile	Gly
			20					25					30		
Val	Asn	Leu	Thr	Asn	Ser	Ser	Phe	His	Asp	Gln	Gln	Ala	Ala	Ile	Val
		35					40					45			
Glu	Arg	Ala	Leu	Glu	Ala	Gly	Val	Thr	Gln	Met	Leu	Leu	Thr	Gly	Thr
		50				55					60				
Ser	Leu	Ala	Val	Ser	Glu	Gln	Ala	Leu	Glu	Leu	Cys	His	Gln	Leu	Asp
65					70				75					80	
Ala	Ser	Gly	Ala	His	Leu	Phe	Ala	Thr	Ala	Gly	Val	His			
				85					90						

<210> 1411

<211> 321

<212> DNA

<213> Homo sapiens

<400> 1411

nnnctgattt caggaatgaa gaacgaacct gaatggatgc ttgaatggcg cttgagtgc
 60
 tttcgtgaat ggtagaaat ggaagagcct agctgggctc atgtcgatta ccctaaaatt
 120
 gattttcaat ctatttctta ctattccgcg ccaaaaagca tgaaggataa gcctaagtcg
 180
 ttagacgaag tcgatacctga attgttacgt acttatgaaa aactgggcat tcctctcata
 240
 gaacagcaaa tgcttgctgg tatcgccgta gatgctgtct ttgactcagt gtctgtcggt
 300
 actacttttc gtcaaaagct t
 321

<210> 1412

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1412

Xaa	Arg	Ile	Ser	Gly	Met	Lys	Asn	Glu	Pro	Glu	Trp	Met	Leu	Glu	Trp
1					5				10					15	
Arg	Leu	Ser	Ala	Phe	Arg	Glu	Trp	Leu	Glu	Met	Glu	Glu	Pro	Ser	Trp


```

      20      25      30
Ala His Val Asp Tyr Pro Lys Ile Asp Phe Gln Ser Ile Ser Tyr Tyr
      35      40      45
Ser Ala Pro Lys Ser Met Lys Asp Lys Pro Lys Ser Leu Asp Glu Val
      50      55      60
Asp Pro Glu Leu Leu Arg Thr Tyr Glu Lys Leu Gly Ile Pro Leu Ile
      65      70      75      80
Glu Gln Gln Met Leu Ala Gly Ile Ala Val Asp Ala Val Phe Asp Ser
      85      90      95
Val Ser Val Val Thr Thr Phe Arg Gln Lys Leu
      100      105

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<210> 1413

<211> 385

<212> DNA

<213> Homo sapiens

<400> 1413

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atgacccatg acgtcagcga agccgtggcg attgccgacc gggatgacct gatcgaagac
60
ggcgaaatcg gacctgacct gatcatcgac ctgccacgtc cgcgtgcccg tggttcacac
120
cgcttgcccg cgttgggaagc cgaagtgata aaccgtgtgc tgtcataacc cngcacgaag
180
ccggaacccg aacatgttaa accgctgcct acgaaattgc gttgggctca ataactcata
240
gaggaacacc atcatgacta taaaagccat caacgtgcgt aaccagttaa aaggcaccat
300
caaggaaatc gtagtcggca acgtgctctc ggaaatcgac gtgcagaccg cctccgggat
360
cgtcacttct gtgatcacta cgcgt
385

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<210> 1414

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1414

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Met Thr His Asp Val Ser Glu Ala Val Ala Ile Ala Asp Arg Val Ile
  1           5           10           15
Leu Ile Glu Asp Gly Glu Ile Gly Leu Asp Leu Ile Ile Asp Leu Pro
      20      25      30
Arg Pro Arg Ala Arg Gly Ser His Arg Leu Ala Ala Leu Glu Ala Glu
      35      40      45
Val Ile Asn Arg Val Leu Ser
      50      55

```

<210> 1415

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1415

acgcgtgcag gcaaacatta atatgagtta acaccacaca ggatgagact gtttgtacct
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gtaactgtcc ttgtcatctg tcttgcagat ttagaagagg aatcagaaag ctgggacaac
120
tctgaggctg aagaggagga gaaagcccct gtgttgccag agagtacaga agggcgggag
180
ctgacccagg gcccggcaga gtcctcctct ctctcaggct gtgggagctg gcagccccgg
240
aagctgccag tcttcaagtc cctccggcac atgaggcagg tcttgggtgc cccttcttcc
300
cgcatgctgg cctggcacgt tctcatgggg aaccaggtga tctggaaaag cagagacgtg
360
gacctcgtcc agtcagcttt tgaagtactt cgggtgagaa catcttttcc ttaggtgtgc
420

<210> 1416

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1416

Met	Arg	Leu	Phe	Val	Pro	Val	Thr	Val	Leu	Val	Ile	Cys	Leu	Ala	Asp
1				5					10					15	
Leu	Glu	Glu	Glu	Ser	Glu	Ser	Trp	Asp	Asn	Ser	Glu	Ala	Glu	Glu	Glu
			20					25					30		
Glu	Lys	Ala	Pro	Val	Leu	Pro	Glu	Ser	Thr	Glu	Gly	Arg	Glu	Leu	Thr
		35					40					45			
Gln	Gly	Pro	Ala	Glu	Ser	Ser	Ser	Leu	Ser	Gly	Cys	Gly	Ser	Trp	Gln
	50					55				60					
Pro	Arg	Lys	Leu	Pro	Val	Phe	Lys	Ser	Leu	Arg	His	Met	Arg	Gln	Val
65					70					75				80	
Leu	Gly	Ala	Pro	Ser	Phe	Arg	Met	Leu	Ala	Trp	His	Val	Leu	Met	Gly
			85						90					95	
Asn	Gln	Val	Ile	Trp	Lys	Ser	Arg	Asp	Val	Asp	Leu	Val	Gln	Ser	Ala
		100						105					110		
Phe	Glu	Val	Leu	Arg	Val	Arg	Thr	Ser	Phe	Pro					
		115					120								

<210> 1417

<211> 5058

<212> DNA

<213> Homo sapiens

<400> 1417

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<210> 1418

<211> 1532

<212> PRT

<213> Homo sapiens

<400> 1418

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Thr Leu Ile Thr Gly Ser Lys Thr Pro Ala Pro Val Thr Ser Thr Gly
           35           40           45
Ser Thr Thr Ala Thr Leu Glu Gly Gln Ser Thr Ala Ala Ser Ser Arg
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Thr Ser Asn Gln Asp Ile Ser Ala Ser Ser Gln Asn His Gln Thr Lys
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Ser Thr Glu Thr Thr Ser Lys Ala Gln Thr Asp Thr Leu Thr Gln Met
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Met Thr Ser Thr Leu Phe Ser Ser Pro Ser Val His Asn Val Met Glu
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Thr Val Thr Gln Glu Thr Ala Pro Pro Asp Glu Met Thr Thr Ser Phe
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Pro Ser Ser Val Thr Asn Thr Leu Met Met Thr Ser Lys Thr Ile Thr
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Ile Gln Asp Thr Ser Ala Ser Ser Gln Asn His Trp Thr Arg Ser Thr
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Gln Thr Thr Arg Glu Ser Gln Thr Ser Thr Leu Thr His Arg Thr Thr
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Ser Thr Pro Ser Phe Ser Pro Ser Val His Asn Val Thr Gly Thr Val
225          230          235          240
Ser Gln Lys Thr Ser Pro Ser Gly Glu Thr Ala Thr Ser Ser Leu Cys
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Thr Ser Thr Gly Ser Thr Leu Gly Asn Pro Gly Glu Thr Ser Ser Val
           275          280          285
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Val Asp Pro Glu Gly Gln Ser Pro Ala Thr Phe Ser Arg Thr Ser Thr
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Gln Asp Thr Thr Ala Phe Ser Lys Asn His Gln Thr Gln Ser Val Glu
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Thr Thr Arg Val Ser Gln Ile Asn Thr Leu Asn Thr Leu Thr Pro Val
           340          345          350
Thr Thr Ser Thr Val Leu Ser Ser Pro Ser Gly Phe Asn Pro Ser Gly
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Thr Val Ser Gln Glu Thr Phe Pro Ser Gly Glu Thr Thr Ile Ser Ser
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Phe	Ser	Ser	Lys	Gly	His	Thr	Thr	Trp	Ser	Gln	Thr	Glu	Leu	Pro Ser
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Gln	Met	Ile	Lys	Thr	Ala	Thr	Ser	Pro	Ser	Ser	Ser	Pro	Met	Leu Asp
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Arg	His	Thr	Ser	Gln	Gln	Ile	Thr	Thr	Ala	Pro	Ser	Thr	Asn	His Ser
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Thr	Ile	His	Ser	Thr	Ser	Thr	Ser	Pro	Gln	Glu	Ser	Pro	Ala	Val Ser
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Thr	Gly	Asp	Gly	His	Thr	Thr	Gln	Ala	Pro	Thr	Thr	Ala	Leu	Gln Ala
705					710					715				720
Thr	Pro	Ser	Ser	His	Asp	Ala	Thr	Leu	Gly	Pro	Ser	Gly	Gly	Thr Ser
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Leu	Ser	Lys	Thr	Gly	Ala	Leu	Thr	Leu	Ala	Asn	Ser	Val	Val	Ser Thr
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Pro	Gly	Gly	Pro	Glu	Gly	Gln	Trp	Thr	Ser	Ala	Ser	Ala	Ser	Thr Ser
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Pro	Asp	Thr	Ala	Ala	Ala	Met	Thr	His	Thr	His	Gln	Ala	Glu	Ser Thr
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Glu	Ala	Ser	Gly	Gln	Thr	Gln	Thr	Ser	Glu	Pro	Ala	Ser	Ser	Gly Ser
785					790					795				800
Arg	Thr	Thr	Ser	Ala	Gly	Thr	Ala	Thr	Pro	Ser	Ser	Ser	Gly	Ala Ser
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Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1295
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Gly Asp Thr Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Val Ser Thr		1310
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Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1325
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Ser His Ala Thr Ser Leu Pro Val Thr Asp Pro Ser Ser Ala Ser Thr		1340
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Gly His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1375
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Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1405
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	1460	1465
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1470
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Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1485
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<210> 1419

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1419

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu
 50 55 60
 Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met
 65 70 75 80
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 Lys Ala Asn Lys Lys Leu Met
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<210> 1421
 <211> 385
 <212> DNA
 <213> Homo sapiens

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<210> 1422
 <211> 125
 <212> PRT
 <213> Homo sapiens

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 Pro Glu Glu Gly Arg Met Leu Glu Gln Ser Arg Ala Gln Leu Leu Ala

35	40	45
Asn Ala Ser Val Met Pro Met Ser Ser Gln Asp Phe Ser Ser Ala Leu		
50	55	60
Leu Leu Asp Cys Cys Arg Thr Gln His Gln Leu Gln Cys Pro Gln Ser		
65	70	75
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly		80
	85	90
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly		95
	100	105
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<210> 1423

<211> 336

<212> DNA

<213> Homo sapiens

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<210> 1424

<211> 112

<212> PRT

<213> Homo sapiens

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20	30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu	
35	45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu	
50	60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met	
65	80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro	
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Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu Val Tyr Trp Val Asp	
100	110

<210> 1425

<211> 672

<212> DNA

<213> Homo sapiens

<400> 1425

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<210> 1426

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1426

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Val Ile Ala Gly Glu Asp Gly Val Asp Ala Gly Val Ile Pro Met Pro
35          40          45
Leu Arg Arg Met Gln Thr Gln Thr Leu Lys Gly Leu Arg Val Ala Trp
50          55          60
Tyr Ser Asp Gly Gly Ile Glu Pro Val Asp Ala Leu Thr His Thr Thr
65          70          75          80
Leu Gln Ala Val Ala Asp Leu Leu Asp Ala Glu Gly Ala Leu Ile Arg
85          90          95
Pro Ala Phe Pro Ser Ala Leu Ser Asn Ala Arg Asp Ile Thr Glu Arg
100         105         110
Tyr Trp Ala Met Ser Gln Ser Ser Gly Ala Gln Ser Ile Gln Leu Phe
115         120         125
Ser Asp Trp Asp Gln Phe Arg Thr Ala Met Leu Gly Phe Met Ala Asp
130         135         140
Tyr Asp Ile Ile Leu Cys Pro Val Asp Ala Ala Pro Ala Thr Gln Leu

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145          150          155          160
Gly Glu Thr Arg Pro Gly Leu Phe Ser Ser Pro Leu Pro Asn Gly Leu
          165          170          175
Ala Gly Trp Pro Cys Val Val Val Arg Ala Gly Thr Asp Ser Ala Gly
          180          185          190
Leu Pro Val Gly Val Gln Ile Val Ala Arg Pro Trp His Glu Pro Val
          195          200          205
Ala Leu Ala Ala Ala Ala Ala Ile Glu Arg Ala Leu Pro Phe Thr Arg
          210          215          220

```

<210> 1427
 <211> 270
 <212> DNA
 <213> Homo sapiens

```

<400> 1427
atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcagtc
60
tttgatgttc cactaagata cggggatctg gtggtgacac ccatgcgact ggcttcggaa
120
ttgatgcaag tccatccctc aggggctgta cgcttcgctc actgttcagt tccccagaat
180
aaactcaact cacaaaagat acttccggtg gaaaaggccc aagggaagat cctcttcatt
240
gcaggagaga atgacgaaag cttggctagc
270

```

<210> 1428
 <211> 90
 <212> PRT
 <213> Homo sapiens

```

<400> 1428
Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
1          5          10          15
Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
          20          25          30
Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
          35          40          45
Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
          50          55          60
Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
65          70          75          80
Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
          85          90

```

<210> 1429
 <211> 384
 <212> DNA
 <213> Homo sapiens

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<400> 1429
ncctagggga ttatcgacat aaacgcgact gcgtaagggtt ggtgactcat cccccagcga
60

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catgaggcaa acgccatgac atccgagaat gcaccgccgc gaggaagat catcatgatg
 120
 gcggtgatcg ccggcgcggt ggtcaccaac atttactgca cccagccggt gctgccgttg
 180
 atcgctcgg acatgggcgt cgcagtgtcg acggtcaacc tgggtggcagg cgcggccttg
 240
 ctggggtttg ccaccgggtt ggcgttttta ttgcccatgg gcgaccgctt tgaccggcgc
 300
 aagctggtac tcgggcagat tgcgctggcg ttctgctttg ccttggcggc ggcttttgcg
 360
 ccgaggatct gggcgttgat cggc
 384

<210> 1430
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1430
 Met Thr Ser Glu Asn Ala Pro Pro Arg Gly Lys Ile Ile Met Met Ala
 1 5 10 15
 Val Ile Ala Gly Ala Val Val Thr Asn Ile Tyr Cys Thr Gln Pro Val
 20 25 30
 Leu Pro Leu Ile Ala Ser Asp Met Gly Val Ala Val Ser Thr Val Asn
 35 40 45
 Leu Val Ala Gly Ala Ala Leu Leu Gly Phe Ala Thr Gly Leu Ala Phe
 50 55 60
 Leu Leu Pro Met Gly Asp Arg Phe Asp Arg Arg Lys Leu Val Leu Gly
 65 70 75 80
 Gln Ile Ala Leu Ala Phe Cys Phe Ala Leu Ala Ala Ala Phe Ala Pro
 85 90 95
 Arg Ile Trp Ala Leu Ile Gly
 100

<210> 1431
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 1431
 aagcttcagg gcagggtgcc cctgaagtca agcctgattc tgcacatct tgtatagcac
 60
 aaactggcga cacctgtgac tttgcctttc ccaggggtccc tgctctccgc tccaggtagg
 120
 ctgagcctga gggaggtgct ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac
 180
 tccttcagct tgtcttggga gagctgtggg ctgcatcccc ctggctcctc gtcccacagg
 240
 cagccccgct gtgtgtctgg tcttgacagg tggtgcagc ttctgggccc tgcttcacg
 300
 ccctcttccc atgacctcc agccttgga ggtgtaatag tttcccatgt tgctgatctt
 360
 tagtttgcc cctctcctt ggctgttctt tctgctgttc catcctctgt gcac
 414

<210> 1432
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1432
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly
 1 5 10 15
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His
 20 25 30
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr
 35 40 45
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys
 50 55 60
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser
 65 70 75 80
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe
 85 90 95
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala
 100 105

<210> 1433
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1433
 aaattttcga tggaactggg cggcaatgca ccgtttattg tatttgatga tgcggatgtg
 60
 gacgcggccg tcagcaatgc tgtggcttgc aagttccgct gtggtggaca aacgtgcatt
 120
 tcggccaacc gaatctacgt gcacgaacaa gtgcacgacg agtttgtctc taagtttggc
 180
 gagagagtca agaagcttcg cgtgggctac ggtctggacg aaaacatcaa cattggaccg
 240
 ctagtgaatg aggctagtca ggacaaagca gagtcacatg tccgtgcatg gcaa
 294

<210> 1434
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1434
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp
 1 5 10 15
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe
 20 25 30
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His
 35 40 45
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys
 50 55 60
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro

65		70		75		80									
Leu	Val	Asn	Glu	Ala	Ser	Gln	Asp	Lys	Ala	Glu	Ser	His	Val	Arg	Ala
				85					90					95	
Met	Gln														

<210> 1435

<211> 1772

<212> DNA

<213> Homo sapiens

<400> 1435

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ntttctggct tatgtggttt ccccggtgtgt gaggtgggat ccactccccg catagtctct
60
cgtggcgatg ggacacctgg aaagtgctgt gatgtctttg aatgtgttaa tgatacaaag
120
ccagcctgcg tatttaacaa tgtggaatat tatgatggag acatgtttcg aatggacaac
180
tgtcggttct gtcgatgcca agggggcggt gccatctgct tcaactgcca gtgtggtgag
240
ataaactgcg agaggacta cgtgcccga ggagagtgtg gcccagtgtg tgaaatccag
300
tgtatccttt taataatccc gctggctgct gccaatggcc tgatccttgc ccacggagac
360
cgggtggcggg aagacgactg cacattctgc cagtgcgtca acggtgaacg ccactgcgtt
420
gcgaccgtct gcggacagac ctgcacaaac cctgtgaaag tgcctgggga gtgttgccct
480
gtgtgcgaag aaccaacctat catcacagtt gatccacctg catgtgggga gttatcaaac
540
tgactctga caggggaagga ctgcattaat ggtttcaaac gcgatcaciaa tggttgtcgg
600
acctgtcagt gcataaacac cgaggaacta tgttcagaac gtaaacaagg ctgcaccttg
660
aactgtccct tcggtttcct tactgatgcc caaaactgtg agatctgtga gtgccgcca
720
aggcccaaga agtgcagacc cataatctgt gacaagtatt gtccacttgg attgctgaag
780
aataagcacg gctgtgacat ctgtcgctgt aagaaatgtc cagagctctc atgcagtaag
840
natctgccc ttgggtttcc agcaggacag tcacggctgt cttatctgca agtgcagaga
900
ggcctctgct tcagctgggc caccatcct gtcgggcact tgtctcaccg tggatggcca
960
tcatcataaa aatgaggaga gctggcacga tgggtgccgg gaatgctact gtctcaatgg
1020
acgggaaatg tgtgccctga tcacctgcc ggtgcctgcc tgtggcaacc ccaccattca
1080
ccctggacag tgetgcccac catgtgcaga tgactttgtg gtgcagaagc cagagctcag
1140
tactccnnct ccatttgcca cggccctgga ggagaatact ttgtggaagg agaaacgtgg
1200
aacattgact cctgtactca gtgcacctgc cacagcggac ggggtgctgtg tgagacagag
1260

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gtgtgcccac cgctgctctg ccagaacccc tcacgcaccc aggattcctg ctgcccacag
 1320
 tgtacagatc aaccttttcg gccttccttg tcccgcaata acagegtacc taattactgc
 1380
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgatcc
 1440
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtcctgccc ttctgtatcc
 1500
 tgtgaaaaac ctgtcttgag aaaaggccag tgttgccct actgcataga agacacaatt
 1560
 ccaaagaagg tgggtgtgcca cttcagtggg aaggcctatg ccgacgagga gcggtgggac
 1620
 cttgacagct gcaccactg ctactgcctg cagggccaga cttctgctc gaccgtcagc
 1680
 tgccccctc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt
 1740
 ccagaaatgt atgtcccagt cccttcacgc gt
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro
1				5					10					15	
Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val
			20					25					30		
Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val
			35				40					45			
Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys
	50					55				60					
Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu
65					70					75				80	
Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val
			85					90						95	
Cys	Glu	Ile	Gln	Cys	Ile	Leu	Leu	Ile	Pro	Leu	Ala	Ala	Ala	Asn	
			100					105					110		
Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	Cys	Thr
			115				120					125			
Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	Thr	Val	Cys
			130				135				140				
Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	Glu	Cys	Cys	Pro
145					150					155					160
Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	Pro	Pro	Ala	Cys	Gly
			165					170						175	
Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	Asp	Cys	Ile	Asn	Gly	Phe
			180					185					190		
Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	Cys	Gln	Cys	Ile	Asn	Thr	Glu
		195					200					205			
Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe
	210					215					220				
Gly	Phe	Leu	Thr	Asp	Ala	Gln	Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro

225					230					235					240
Arg	Pro	Lys	Lys	Cys	Arg	Pro	Ile	Ile	Cys	Asp	Lys	Tyr	Cys	Pro	Leu
				245					250					255	
Gly	Leu	Leu	Lys	Asn	Lys	His	Gly	Cys	Asp	Ile	Cys	Arg	Cys	Lys	Lys
				260					265					270	
Cys	Pro	Glu	Leu	Ser	Cys	Ser	Lys	Xaa	Leu	Pro	Leu	Gly	Phe	Pro	Ala
				275					280					285	
Gly	Gln	Ser	Arg	Leu	Ser	Tyr	Leu	Gln	Val	Gln	Arg	Gly	Leu	Cys	Phe
				290					295					300	
Ser	Trp	Ala	Thr	His	Pro	Val	Gly	His	Leu	Ser	His	Arg	Gly	Trp	Ser
305					310					315					320
Ser	Ser														

<210> 1437

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1437

cgggaaactgt gctcgccac catccggtga ccggtgtcgg gcagtggcaa ctcaacaccc
60

aggccatgac cggagccatc ccgagcagca ggtgcacggc ccgggccggtt gactcgtgga
120

cccgtaaccct catgacctcg atgcaacttc cacggtggtc caccgatcac atcgaccgct
180

cggtccatgt cgatgctgag cagttcgacc ggttgcgag cgagttcctg tcccgtagggc
240

acagttctctgg ccctgccgca catgggggtcc tgggacttgg ccggggcctg .gggtggccaga
300

cgcggttctt ccccgagttc cgtcgcggag aatcttccga gggcacagtt cgagttgttc
360

tqccgcacgc gt

372

<210> 1438

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1438

Met Ser Met Leu Ser Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
1 5 10 15

Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
20 25 30

Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
35 40 45

Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
50 55 60

<210> 1439

<211> 471

<212> DNA

<213> Homo sapiens

<400> 1439

accggtttgc tttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc
 60
 tgcttctttc cacaatgtag acttaaaaaa atgccgtaa acattttacc atatgattga
 120
 gtcaggtgtg gggagtcgca gtaaacattt taccatgtga ttgagtcag ggtggggagt
 180
 cgcggaaata cacagggcag gcagttcgct atcacgatgt tctctctcat ttctgtcttt
 240
 ggtctgtctt cctgggtaat gtcacatgga gaccagggg atctgccatc agctgtgtgc
 300
 agtgggttaa caagacgacg gggaaacttca gagtgcaggc agtcctcatc tttggcagat
 360
 tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaaa atcaatacag
 420
 cggtttcaca gtcattttcc gacacgggca gagggggtgaa gatactgagt c
 471

<210> 1440

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1440

Met	Gly	Gly	Glu	Ser	Arg	Lys	Tyr	Thr	Gly	Gln	Ala	Val	Arg	Tyr	His
1				5					10					15	
Asp	Val	Leu	Ser	His	Phe	Cys	Leu	Trp	Ser	Val	Phe	Leu	Gly	Asn	Val
			20					25					30		
Thr	Trp	Arg	Pro	Arg	Gly	Ser	Ala	Ile	Ser	Cys	Val	Gln	Trp	Val	Asn
		35				40						45			
Lys	Thr	Thr	Gly	Asn	Phe	Arg	Val	Gln	Ala	Val	Leu	Ile	Phe	Gly	Arg
	50					55					60				
Phe	Cys	Ile	Cys	Thr	Phe	Thr	His	Ser	Leu	Lys	Cys	Ile	Cys	Asn	Pro
65				70					75					80	
Lys	Ile	Asn	Thr	Ala	Val	Ser	Gln	Ser	Phe	Ser	Asp	Thr	Gly	Arg	Gly
			85					90					95		
Val	Lys	Ile	Leu	Ser											
			100												

<210> 1441

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1441

nnngagtcgc ggggaccttc atggactctc tcgtgctccg tagctcacac tcaccgcacg
 60
 gcagctcaca ttcaccacac gggaactcac tctcaccaca cggcagctca ctctctctgc
 120
 accgcagctc aactcaccg cacggcagct cactctcacc gcacggcagc tcacactcac
 180
 cacacagcag ctactctta ccggacgggg aacctaact taccggacgg gaagcctcac
 240

tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg cacggcagct
 300
 cactctcacc gcaccgcagc tcactctcac cggacgggag ctcactctca ccacacggca
 360
 cctcactctc acgcgt
 376

<210> 1442
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1442
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His
 1 5 10 15
 Thr His Arg Thr Ala Ala His Ile His His Thr Gly Thr His Ser His
 20 25 30
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr
 35 40 45
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His His Thr Ala Ala
 50 55 60
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His
 65 70 75 80
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His
 85 90 95
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr
 100 105 110
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala
 115 120 125

<210> 1443
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 1443
 atggcagccc tgcgtcccaa ggagctgcc aactaatgg tcgccatcgg caatgcgagc
 60
 ataaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac cgcctctgcg
 120
 gaagccgcta cgacttcctg ggctgacatc gactgcgaca agaaaacctg gacgatccca
 180
 gcggagcgta tgaaaaagcg acgtgcccat gtcataccgc taaccgagca cgcacttgcc
 240
 ttgcttgaga caatcaaacc ctacagcggc cacagagagt acgcgt
 286

<210> 1444
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1444
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile


```

      1             5             10             15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln
      20             25             30
Leu His Thr Met Thr Arg Pro Ala Glu Ala Ala Thr Thr Ser Trp Ala
      35             40             45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met
      50             55             60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala
      65             70             75             80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala
      85             90             95

```

<210> 1445

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1445

```

naccgggttca ccgggggaggc cttcgatggg ggcaagggtca gcatgggttg cccgattccc
60
atgtacctgt atggcacctt cgtcgttccg gacttcgacg cattcatctc cggcaagcag
120
actccctacc gggagacggt ctccaagcgg accactactt ggttctttcg agccggctca
180
gaggtttatg agctggcctt cccccgagga gtcgtgttcg ccatgcaaag cgcctcgttg
240
agggtggacc ccgacaacac cgtcgacaag ctgccaacac tcggcgagcg cctg
294

```

<210> 1446

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1446

```

Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val
      1             5             10             15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe
      20             25             30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser
      35             40             45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu
      50             55             60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu
      65             70             75             80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu
      85             90             95
Arg Leu

```

<210> 1447

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1447

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nnncagaacc agaagatcaa cctgcatgac ggctcgttct ccgacgttgg cggcatggtg
60
ggtaatatct ccattgcccc ggggtgtcacg atcgagaacg ccgtcggcgg ttcgggcaac
120
gacctgctga tcggcaacga tgcggccaac gaactgcgcg gcggtgccgg caacgatatc
180
ctctacgggg ctggcggtgc cgaccagggt tgggttggtt cgggcaacaa taccttcgtg
240
ttcgccgccc tttccgactc ggcgccgaaa gcggccgacc ggatcatgga cttcaccagt
300
ggccaggaca agatcgatct gtccgggatc acccatgggt cgggcctgac cttcgtcaac
360
gcg
363

```

<210> 1448

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1448

```

Xaa Gln Asn Gln Lys Ile Asn Leu His Asp Gly Ser Phe Ser Asp Val
1           5           10           15
Gly Gly Met Val Gly Asn Ile Ser Ile Ala Gln Gly Val Thr Ile Glu
20           25           30
Asn Ala Val Gly Gly Ser Gly Asn Asp Leu Leu Ile Gly Asn Asp Ala
35           40           45
Ala Asn Glu Leu Arg Gly Gly Ala Gly Asn Asp Ile Leu Tyr Gly Ala
50           55           60
Gly Gly Ala Asp Gln Val Trp Val Gly Ser Gly Asn Asn Thr Phe Val
65           70           75           80
Phe Ala Ala Val Ser Asp Ser Ala Pro Lys Ala Ala Asp Arg Ile Met
85           90           95
Asp Phe Thr Ser Gly Gln Asp Lys Ile Asp Leu Ser Gly Ile Thr His
100          105          110
Gly Ser Gly Leu Thr Phe Val Asn Ala
115          120

```

<210> 1449

<211> 541

<212> DNA

<213> Homo sapiens

<400> 1449

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aggcgctacc agattatggg ctgcccgacc tcaatgacat gcgcttgagc ctgcatgaat
60
cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtacgag cctcggttgg
120
ggaatgtacg tgtcaggagg agggagggtg cctacaaccc tttggtactg gcgtttgtga
180
ttgaggcaac cgtcgtcatc gatggtgtca tccaacctgt ggtgtttaac gcacacctgg
240

```


tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg
 300
 aactcagtgc attgcgcacg cttggggcggc gtttttctga acgcaatccc gccctggcac
 360
 cttttcttgc cgattccagg ccaggaccgc gacgtcgagg gtctattgaa agtctttgcc
 420
 tttctccccg ggcgcctgcg ccagaagctt gctgacgagc ttctgaggtt gacccattca
 480
 ttgatgcact tgggtgtggc caattacatg cggccattgc cggccttcag tattttgcag
 540
 t
 541

<210> 1450

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1450

Met	Arg	Leu	Ser	Leu	His	Glu	Ser	Leu	Ser	Gln	Ser	Arg	Leu	Ala	Ile
1				5				10						15	
Glu	Arg	Phe	Ile	Gln	Ala	Tyr	Glu	Pro	Arg	Leu	Gly	Asn	Val	Arg	Val
			20					25					30		
Arg	Arg	Arg	Glu	Gly	Ala	Tyr	Asn	Pro	Leu	Val	Leu	Ala	Phe	Val	Ile
			35				40					45			
Glu	Ala	Thr	Val	Val	Ile	Asp	Gly	Val	Ile	Gln	Pro	Val	Val	Phe	Asn
			50				55				60				
Ala	His	Leu	Val	Gly	Gly	Gly	Thr	Gly	Arg	Val	Cys	Tyr	Leu	Met	Phe
65					70				75					80	
Phe	Glu	Leu	Phe	Tyr	Gln	Ser	Glu	Leu	Ser	Ala	Leu	Arg	Thr	Leu	Gly
			85					90					95		
Arg	Arg	Phe	Ser	Glu	Arg	Asn	Pro	Ala	Leu	Ala	Pro	Phe	Leu	Ala	Asp
			100				105						110		
Ser	Arg	Pro	Gly	Pro	Gly	Arg	Arg	Gly	Ser	Ile	Glu	Ser	Leu	Cys	Leu
		115				120						125			
Ser	Pro	Arg	Ala	Pro	Ala	Pro	Glu	Ala	Cys						
		130				135									

<210> 1451

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1451

aggcctctgg cgagttgatc tacagcttcg gaccgggtgc tatggctact ggcgtcaagt
 60
 acacgaacac agtttgcact cctgtgggcg actacgaggt ggtgctgacg gattcttggg
 120
 gtgatggctg gaacccgggt tcttacctga acatgtacga cagctcggac aacttgatcc
 180
 aggagttcac gatggattac gacgcctctt ctcgtaacat taaggagaag cacggcttct
 240
 tcacgggtggc ttccaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg
 300

tggacaagga gtggaactct gtggac
326

<210> 1452

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1452

```
Met Ala Thr Gly Val Lys Tyr Thr Asn Thr Val Cys Thr Pro Val Gly
 1           5           10           15
Asp Tyr Glu Val Val Leu Thr Asp Ser Trp Gly Asp Gly Trp Asn Pro
          20           25           30
Gly Ser Tyr Leu Asn Met Tyr Asp Ser Ser Asp Asn Leu Ile Gln Glu
          35           40           45
Phe Thr Met Asp Tyr Asp Ala Ser Ser Arg Asn Ile Lys Glu Lys His
          50           55           60
Gly Phe Phe Thr Val Ala Ser Thr Thr Ser Ser Gly Thr Val Trp Lys
65           70           75           80
Ile Met Ala Asn Lys Lys Val Asp Lys Glu Trp Asn Ser Val Asp
          85           90           95
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<210> 1453

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1453

```
cgggcgcgcg gcccacgtg caccgcgtgc atggtccctc gaggacgcgc atctgcagcc
60
cccgtcccc gcaaactcc aggcgggaga gtcctggcca aggcgcgtgc atcacatgat
120
acaggagggg catgcacacg ctcacgtgca cacagcctca aacacgtca tccgtacata
180
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac
240
cgactgcct atagaaatgt gcaaaccacc cgtgcgcaca ggcccctcca cccatgcagg
300
cgtgtgcaca tcacccacac ggacac
326
```

<210> 1454

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1454

```
Met Val Pro Arg Gly Arg Ala Ser Ala Ala Pro Ala Pro Arg Lys Pro
 1           5           10           15
Pro Gly Arg Arg Ala Pro Ala Lys Ala Ala Ala Ser His Asp Thr Gly
          20           25           30
Gly Ala Cys Thr Arg Ser Arg Ala His Ser Leu Lys His Ala His Pro
          35           40           45
Tyr Ile Gln Glu Cys Val Asn Ala Leu Arg Cys Thr Gly Gln Arg His
```


50		55		60											
Arg	His	Leu	Phe	Ala	His	Arg	Leu	Ala	Tyr	Arg	Asn	Val	Gln	Thr	Thr
65			70						75						80
Arg	Ala	His	Arg	Pro	Leu	His	Pro	Cys	Arg	Arg	Val	His	Ile	Thr	His
			85						90					95	
Thr	Asp														

<210> 1455
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 1455
 gatccagtca aaaaagcatg tggggttgct cacgctgggt ggaaagggtac tttgttgggt
 60
 gttgctatgg ctacagtga tgctatgata gcagaatatg gctgccgttt ggaaaaactt
 120
 tgggtggacct tggacccttc agtgggacct ggctgtttta ctcttcagg ggaatcagca
 180
 gaggcatttc ataatcttca tctgcatgt gtacaactat ttgattcacc aaatccctgt
 240
 atcgacatcc gtaaagccac aagatacttg actggatttt tgtataactg cttcctgcct
 300
 ccttccaaac tgac
 314

<210> 1456
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1456
Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
1 5 10 15
Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
20 25 30
Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
35 40 45
Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
50 55 60
Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
65 70 75 80
Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
85 90 95
Cys Phe Leu Pro Pro Ser Lys Leu
100

<210> 1457
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1457

nattcaccag aatccccaga atcccccaaa tactacattg cacttttaggg ttcctttcta
 60
 gcacatgcat tgctaaaatc ggcgccaga accttctctg cccctctccc atgggatgca
 120
 atgtcagcgg agaaacagac caagtctgca ctagcctgtc cctacaccct cccagggaaa
 180
 aggtccccct ggcceaagtc aacagctccc agaggaagcc cactgactgc tctcttcagg
 240
 gtggggggaca caggaagtcc acgcttgac ggaggggacg ggcacaccta ccgtgactgc
 300
 cagagcccat tttgggagtc tgattggaat ttatacagca ggagcactgg gcactcggac
 360
 aactccagcc cacaaccaag tcaactgggt gcctaccac tgcccaagtg cctcaagtca
 420
 acacattcct gcaactgn
 437

<210> 1458

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1458

Met	Ser	Ala	Glu	Lys	Gln	Thr	Lys	Ser	Ala	Leu	Ala	Cys	Pro	Tyr	Thr
1				5				10				15			
Leu	Pro	Arg	Lys	Arg	Ser	Pro	Cys	Ala	Lys	Ser	Thr	Ala	Pro	Arg	Gly
			20					25				30			
Ser	Pro	Leu	Thr	Ala	Leu	Phe	Arg	Val	Gly	Asp	Thr	Gly	Ser	Pro	Arg
		35					40				45				
Leu	His	Gly	Gly	Asp	Gly	His	Thr	Tyr	Arg	Asp	Cys	Gln	Ser	Pro	Phe
	50					55				60					
Trp	Glu	Ser	Asp	Trp	Asn	Leu	Tyr	Ser	Arg	Ser	Thr	Gly	His	Ser	Asp
65					70				75					80	
Asn	Ser	Ser	Pro	Gln	Pro	Ser	His	Trp	Ala	Tyr	Pro	Leu	Pro	Lys	
			85					90				95			
Cys	Leu	Lys	Ser	Thr	His	Ser	Cys	Thr							
			100					105							

<210> 1459

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1459

ngagagggtca ccggccacga gattcccgcg gaggtcgcg cccgccgcg gggcgacccg
 60
 gccgtactca tcgcttcttc ggagaagatc aagcgggagc tgggctggaa cccgacgcgc
 120
 acggatctgc gccgcatcgt cgaggacgcc tgggccttta cggctggggg ggccgaacgg
 180
 taaacccttg gtaaggcgac gcagttatcc tcgatctcct cccagagcag gcggcagccc
 240
 gccactgcgg tgctcgagcat gccctccac tccccgatcg ccatgagctg gcgan
 295

<210> 1460
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 1460
 Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg
 1 5 10 15
 Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg
 20 25 30
 Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu
 35 40 45
 Asp Ala Trp Ala Phe Thr Ala Gly Gly Ala Glu Arg
 50 55 60

<210> 1461
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1461
 nnaagctttac gtgaaatgaa acgtcaatgg caacaggcga caatcgtgcc agagaaattg
 60
 gttgaagcac agtcaattgc gggttctaaa tgcgaacacg cctggcgctt acaacgttca
 120
 gaaaatgact gggtaggctt tgaaaaaaat tggaaagagg ttgttgcatc atcccgtgaa
 180
 gaagcacaaa ttcgcgggtga agcgcttaat ctaacgcctt atgatgcatc gcttgataag
 240
 tttgaaccag gcacgacaac ggtttcgcctc aatactttgt tttcaaaggc aaagacgtgg
 300
 ttacctacgt taattgaaaa agcgcttagaa aagcagcaat cagaatctat cattatgccg
 360
 tcaggcacct tttccacggc gaatcaaaaa gcccttggat tagaaataat gaaattgtta
 420
 aaattcgact tt
 432

<210> 1462
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 1462
 Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val
 1 5 10 15
 Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu
 20 25 30
 His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu
 35 40 45
 Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile
 50 55 60
 Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys

65					70					75				80
Phe	Glu	Pro	Gly	Thr	Thr	Val	Ser	Leu	Asn	Thr	Leu	Phe	Ser	Lys
				85				90					95	
Val	Lys	Thr	Trp	Leu	Pro	Thr	Leu	Ile	Glu	Lys	Ala	Leu	Glu	Lys
			100				105					110		
Gln	Ser	Glu	Ser	Ile	Ile	Met	Pro	Ser	Gly	Thr	Phe	Ser	Thr	Ala
			115			120						125		Asn
Gln	Lys	Ala	Leu	Gly	Leu	Glu	Ile	Met	Lys	Leu	Leu	Lys	Phe	Asp
			130			135					140			Phe

<210> 1463

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1463

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nacgcgttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
60
gccaaagtca tgggccgtgg cgacgtaccg gcaccgttcg aaaccgaatg cccgttctac
120
gcgctgctgg aattcgaagc caccaccgaa gaagtcgcca accacgccct ggaaaccttc
180
gagcactgcg ttgagcaggg ctgggtgctg gacggcgtga tgagccagag cgaaacccaa
240
ctgcacaacc tgtggaaact gcgcgagtac atctcggaga ctatttccca ctggacgccc
300
tacaagaacg acatctccgt gaccgtttcc aaagtccccg cgttcttgaa ggaaattgac
360
gcgatcgctg tgagcattac cgggacttcg aaattgttgg tcggccacat cggcgacgca
420
a
421

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<210> 1464

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1464

Xaa	Ala	Phe	Gln	Ser	Lys	Leu	Asp	Leu	Thr	Ala	Phe	Glu	Phe	Phe	Ser
1				5				10					15		
Asp	Lys	Ala	Leu	Ala	Lys	Val	Met	Gly	Arg	Gly	Asp	Val	Pro	Ala	Pro
			20				25					30			
Phe	Glu	Thr	Glu	Cys	Pro	Phe	Tyr	Ala	Leu	Leu	Glu	Phe	Glu	Ala	Thr
			35				40					45			
Thr	Glu	Glu	Val	Ala	Asn	His	Ala	Leu	Glu	Thr	Phe	Glu	His	Cys	Val
			50			55				60					
Glu	Gln	Gly	Trp	Val	Leu	Asp	Gly	Val	Met	Ser	Gln	Ser	Glu	Thr	Gln
65					70				75					80	
Leu	His	Asn	Leu	Trp	Lys	Leu	Arg	Glu	Tyr	Ile	Ser	Glu	Thr	Ile	Ser
			85				90						95		
His	Trp	Thr	Pro	Tyr	Lys	Asn	Asp	Ile	Ser	Val	Thr	Val	Ser	Lys	Val
			100				105					110			
Pro	Ala	Phe	Leu	Lys	Glu	Ile	Asp	Ala	Ile	Val	Val	Ser	Ile	Thr	Arg

	115		120		125						
Thr	Ser	Lys	Leu	Leu	Val	Gly	His	Ile	Gly	Asp	Ala
	130				135						140

<210> 1465
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 1465
 gtgcacggtc tttgagctgc aattcccagg aatcaggggc cataggcggg agatggcatg
 60
 cagcctctcg ggcgggaaag tgggtctacag tgcttgcttg cccgggcagg cagctcgtag
 120
 gcttatatgc ttagtggtta tggcccctac cactgttttt gaccgcgcta ccattcgcca
 180
 caacctcacc gaattcaaac tccggtggat ttcccacgcc gagcagtgga aggcggaaaa
 240
 ccgtcctgca acagagtcta aagccgctga gacggactgc tcagtacatg gggatctctg
 300
 gaccttggcc acggaagttt tcggtcaagc acccgaattc gacttcccat atatgaaact
 360
 cactcggcag gaatgtaggt tcctttttct gccgagaaac gacatcagct tgagctgctt
 420
 cacg
 424

<210> 1466
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1466
 Met Ala Cys Ser Leu Ser Gly Gly Lys Val Val Tyr Ser Ala Cys Leu
 1 5 10 15
 Pro Gly Gln Ala Ala Arg Arg Leu Ile Cys Leu Val Val Met Ala Pro
 20 25 30
 Thr Thr Val Phe Asp Arg Ala Thr Ile Arg His Asn Leu Thr Glu Phe
 35 40 45
 Lys Leu Arg Trp Ile Ser His Ala Glu Gln Trp Lys Ala Glu Asn Arg
 50 55 60
 Pro Ala Thr Glu Ser Lys Ala Ala Glu Thr Asp Cys Ser Val His Gly
 65 70 75 80
 Asp Leu Trp Thr Leu Ala Thr Glu Val Phe Gly Gln Ala Pro Glu Phe
 85 90 95
 Asp Phe Pro Tyr Met Lys Leu Thr Arg Gln Glu Cys Arg Phe Leu Phe
 100 105 110
 Leu Pro Arg Asn Asp Ile Ser Leu Ser Cys Phe Thr
 115 120

<210> 1467
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1467

nacgcgtgac ggcgaaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg
 60
 gtgccgtgca tcatggctca agtgccgcgc aactttcggc tgctcgagga gctggagaaa
 120
 ggcgaaaagg ggctaggaaa ttgctcgtgc tcttacggcc ttgcgaacag tgatgacatt
 180
 cgtacgtatg cgctgtgct gatggctcatg acaacgtgga atgccacgat cctaggcccg
 240
 gccaaactcg tgcatgagaa ccgcataatc tgcttcgcgc tcgtgtgtgg cgactcgtac
 300
 cctcttgtgc cgctgagat ttggttccag acgcgcatac acttgccgtg cgtcgtatgc
 360
 cacacgggcc gcgtcatgcc cgatcagttc tcgcccctct tgcattggcg tgatgagtac
 420
 actatggaaa gctgctgcat g
 441

<210> 1468

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1468

Met	Ala	Gln	Val	Pro	Arg	Asn	Phe	Arg	Leu	Leu	Glu	Glu	Leu	Glu	Lys
1				5					10					15	
Gly	Glu	Lys	Gly	Leu	Gly	Asn	Gly	Ser	Cys	Ser	Tyr	Gly	Leu	Ala	Asn
			20					25					30		
Ser	Asp	Asp	Ile	Arg	Thr	Tyr	Ala	Pro	Val	Leu	Met	Val	Met	Thr	Thr
			35				40					45			
Trp	Asn	Ala	Thr	Ile	Leu	Gly	Pro	Ala	Asn	Ser	Val	His	Glu	Asn	Arg
	50					55					60				
Ile	Tyr	Cys	Leu	Arg	Leu	Val	Cys	Gly	Asp	Ser	Tyr	Pro	Leu	Val	Pro
65					70				75						80
Pro	Glu	Ile	Trp	Phe	Gln	Thr	Arg	Ile	Asn	Leu	Pro	Cys	Val	Asp	Ala
				85					90					95	
His	Thr	Gly	Arg	Val	Met	Pro	Asp	Gln	Phe	Ser	Pro	Leu	Leu	His	Trp
			100					105					110		
Arg	Asp	Glu	Tyr	Thr	Met	Glu	Ser	Cys	Cys	Met					
		115						120							

<210> 1469

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1469

nngctcgatc tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg
 60
 gcgcttcaac atcttttagc gatttttagtg ccaattgtca ccnctggatt attgatttgc
 120
 ttggcattag gcgtgtctcg cgaagacacc aatatgattc tttctatgtc attaattatt
 180

tcagggatcg cgactttctt gcaatgtaaa aaagttgggc catttggcgc tggattactt
 240
 attgttcaag gaactagctt taatttcatt ggtcctatca ttggtatagg tagctcaatg
 300
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttgggtg cgtaatcgca
 360
 gggtcattta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact
 420
 cctctcgta caggaatcgt cgttctgttg attggtctac cattaatg
 468

<210> 1470
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 1470
 Xaa Leu Asp Leu Val Tyr Gly Leu Asn Asp Arg Pro Asn Pro Phe Ile
 1 5 10 15
 Ala Phe Leu Ala Ala Leu Gln His Leu Leu Ala Ile Leu Val Pro Ile
 20 25 30
 Val Thr Xaa Gly Leu Leu Ile Cys Leu Ala Leu Gly Val Ser Arg Glu
 35 40 45
 Asp Thr Asn Met Ile Leu Ser Met Ser Leu Ile Ile Ser Gly Ile Ala
 50 55 60
 Thr Phe Leu Gln Cys Lys Lys Val Gly Pro Phe Gly Ala Gly Leu Leu
 65 70 75 80
 Ile Val Gln Gly Thr Ser Phe Asn Phe Ile Gly Pro Ile Ile Gly Ile
 85 90 95
 Gly Ser Ser Met Val Ala Ala Gly Thr Pro Val Glu Gln Val Met Ala
 100 105 110
 Ala Ile Phe Gly Val Val Ile Ala Gly Ser Phe Ile Glu Met Gly Val
 115 120 125
 Ser Gln Ile Leu Pro Trp Val Lys Lys Leu Ile Thr Pro Leu Val Thr
 130 135 140
 Gly Ile Val Val Leu Leu Ile Gly Leu Pro Leu Met
 145 150 155

<210> 1471
 <211> 341
 <212> DNA
 <213> Homo sapiens

<400> 1471
 gcgtggatgg ggatcctgaa aaacaatggc gtgctgaata acttcttgct gtggctcggc
 60
 gttatcgatc agccgctgac gattttgcac accaatctgg cgggtgtatat cggcattgtg
 120
 tacgcttata tgccgtttat ggtactgccc atttatacgg cgctgacgcg cattgattac
 180
 tcgctgggtg aggcctcact ggatctcggg gcccgccgc tgaaaacggt tttcaatgtg
 240
 attgtcccgc tcaccaaagg cggcattatc gcggggtcga tgctgggtgt tatcccggcg
 300

gtcgggtgagt ttgttatccc ggaactgctc ggcggcggcc g
341

<210> 1472
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1472
Ala Trp Met Gly Ile Leu Lys Asn Asn Gly Val Leu Asn Asn Phe Leu
1 5 10 15
Leu Trp Leu Gly Val Ile Asp Gln Pro Leu Thr Ile Leu His Thr Asn
20 25 30
Leu Ala Val Tyr Ile Gly Ile Val Tyr Ala Tyr Leu Pro Phe Met Val
35 40 45
Leu Pro Ile Tyr Thr Ala Leu Thr Arg Ile Asp Tyr Ser Leu Val Glu
50 55 60
Ala Ser Leu Asp Leu Gly Ala Arg Pro Leu Lys Thr Phe Phe Asn Val
65 70 75 80
Ile Val Pro Leu Thr Lys Gly Gly Ile Ile Ala Gly Ser Met Leu Val
85 90 95
Phe Ile Pro Ala Val Gly Glu Phe Val Ile Pro Glu Leu Leu Gly Gly
100 105 110
Gly

<210> 1473
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1473
tccggaactg ctcaatgtct gtccagcaca taagatccat gcttgaagaa tgagtctcaa
60
gaaactgacg gaaatgttca aactccagtt tggtgttaag cagatcacta aacttaaaat
120
gcttgatttc tgcaggaaca ttatcccaat attctgttcg tttagagacg ttagagagtg
180
ataaaatgcc agttccaatt tcacaagtgg tgcctcagc tttcttggaa aatgtctctt
240
tatgcaaagc ctgtagcttt ctgaagtatg tggagtctaa ctgtcgagtt tcttccacca
300
gtccacctt tttataagca atttggtccg attttaccat ctttgtccat gg
352

<210> 1474
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1474
Met Val Lys Ser Asp Gln Ile Ala Tyr Lys Lys Val Glu Leu Val Glu
1 5 10 15
Glu Thr Arg Gln Leu Asp Ser Thr Tyr Phe Arg Lys Leu Gln Ala Leu


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                20                25                30
His Lys Glu Thr Phe Ser Lys Lys Ala Glu Asp Thr Thr Cys Glu Ile
                35                40                45
Gly Thr Gly Ile Leu Ser Leu Ser Asn Val Ser Lys Arg Thr Glu Tyr
                50                55                60
Trp Asp Asn Val Pro Ala Glu Tyr Lys His Phe Lys Phe Ser Asp Leu
65                70                75                80
Leu Asn Asn Lys Leu Glu Phe Glu His Phe Arg Gln Phe Leu Glu Thr
                85                90                95
His Ser Ser Ser Met Asp Leu Met Cys Trp Thr Asp Ile Glu Gln Phe
                100                105                110
Arg

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<210> 1475
 <211> 389
 <212> DNA
 <213> Homo sapiens

<400> 1475
 accggtgccg gagccgatct ccacgatggt cttggcgccg gtgcggccga accactcatc
 60
 gacatcgata agctcatcgc ttaagacgcg gccagctcg ggccagcatt gctcaaaaag
 120
 ctggtgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgccc aggcgcgggt
 180
 agtccaggtc attatcaaag accgcattga agtccgtttg cggcgggcga cccggcggca
 240
 tttctccggc agggggtggt ttgagaatta tccgtgctat acatcgcgcc ctatttttcc
 300
 ctgtccaggc atggcaagca atatgccgcg cggggtattt tccccgccgt atggggaggg
 360
 ggataaccgg agcttgacgg ggtggtgtc
 389

<210> 1476
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1476
 Met Val Leu Ala Pro Val Arg Pro Asn His Ser Ser Thr Ser Ile Ser
 1 5 10 15
 Ser Ser Leu Lys Thr Arg Pro Ser Ser Gly Gln His Cys Ser Lys Ser
 20 25 30
 Trp Cys Trp Leu Ser Val Ser Val Pro Arg Gly Lys Gly Thr Phe Ala
 35 40 45
 Gln Ala Arg Val Val Gln Val Ile Ile Lys Asp Arg Ile Glu Val Arg
 50 55 60
 Leu Arg Arg Ala Thr Arg Arg His Phe Ser Gly Arg Gly Cys Phe Glu
 65 70 75 80
 Asn Tyr Pro Cys Tyr Thr Ser Arg Pro Ile Phe Pro Cys Pro Gly Met
 85 90 95
 Ala Ser Asn Met Pro Arg Arg Val Phe Ser Pro Pro Tyr Gly Glu Gly

<400> 1478																
Tyr	Ser	Glu	Asn	Leu	His	Asp	Thr	His	Phe	Leu	Lys	Thr	Tyr	Cys	Val	
1				5					10					15		
Gly	Phe	Glu	Gln	Phe	Leu	Pro	Tyr	Leu	Leu	Gly	Gln	Thr	Asp	Gly	Gln	
			20					25					30			
Pro	Lys	Asp	Ala	Gln	Trp	Ala	Ser	Ala	Leu	Cys	Gly	Ile	Asp	Ala	Glu	
		35					40					45				
Ile	Ile	Arg	Ala	Leu	Ala	Arg	Gln	Met	Ala	Ala	Asn	Arg	Thr	Gln	Ile	
	50					55					60					
Ile	Ala	Gly	Trp	Cys	Val	Gln	Arg	Met	Gln	His	Gly	Glu	Gln	Trp	Ala	
65					70					75					80	
Trp	Met	Thr	Val	Val	Leu	Ala	Ala	Met	Leu	Gly	Gln	Ile	Gly	Leu	Pro	
			85						90					95		
Gly	Gly	Gly	Phe	Gly	Phe	Gly	Trp	Pro	Ser	Asn	Gly	Ala	Gly	Thr	Pro	
			100					105					110			
Glu	Pro	Gln	Gly	Val	Ile	Leu	Ser	Gly	Phe	Ser	Gly	Ser	Pro	Ala	Thr	
		115					120					125				
Pro	Ala	Arg	His	Ala	Lys	Gly	Asp	Phe	Lys	Gly	Tyr	Ser	Ser	Thr	Ile	
	130					135					140					
Pro	Ile	Ala	Arg	Phe	Ile	Asp	Ala	Met	Leu	Glu	Pro	Gly	Lys	Glu	Ile	

145 150 155 160

Asp Trp Asn Gly Lys Arg

165

<210> 1479

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1479

acgcgtgtgg agctggcacc atgaaagcac gatgtgcatc actcatagag gcaggcacac

60

ttaagtatgt tctttacatt gaaacagaaa ggaaagaaga taggaaaaat ggtgccagca

120

cgctgggctt tttttgtttg ctgttttggg tggggtgtgc tagtgcaagtg tccgggtgtac

180

gcttttgtcc tcaaacaggc ttgttccccg gtcagagttt cattattggt gctggtaaac

240

aaatgccaaag tttgacaaaa aacagtgaag taaagcaaaa gattttgaaa aatgcttcac

300

catgtcagaa ggaaagaacc cttttcacgg gtgcctgccc acatttcctt gccagcctg

360

agaccctatt gactttgaat tatcttttgc tgttttattt ctatgaaaat tatatacgcg

420

t

421

<210> 1480

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1480

Met Lys Ala Arg Cys Ala Ser Leu Ile Glu Ala Gly Thr Leu Lys Tyr

1 5 10 15

Val Leu Tyr Ile Glu Thr Glu Arg Lys Glu Asp Arg Lys Asn Gly Ala

20 25 30

Ser Thr Leu Gly Phe Phe Cys Leu Leu Phe Trp Val Gly Cys Ala Ser

35 40 45

Ala Val Ser Gly Val Arg Phe Cys Pro Gln Thr Gly Leu Phe Pro Gly

50 55 60

Gln Ser Phe Ile Ile Val Ala Gly Lys Gln Met Pro Ser Leu Thr Lys

65 70 75 80

Asn Ser Glu Ile Lys Gln Lys Ile Leu Lys Asn Ala Ser Ser Cys Gln

85 90 95

Lys Glu Arg Thr Leu Phe Thr Gly Ala Cys Pro His Phe Leu Ala Gln

100 105 110

Pro Glu Thr Leu Leu Thr Leu Asn Tyr Leu Leu Leu Phe Tyr Phe Tyr

115 120 125

Glu Asn Tyr Ile Arg

130

<210> 1481

<211> 545

<212> DNA

<213> Homo sapiens

<400> 1481

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 120
 agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgacccggg
 180
 tcgacgacgag cgagttgtcg catcgggcca acggtgtgta gacaagtcag catgagcacc
 240
 gagaaccagcag tggttaaggc cattgccgat gcgttgcgc acgtcaatga ccccgagatc
 300
 aaacgccccca ttaccgatct caacatgatt gatgagatta ccgtcgacga gcaaggacgc
 360
 gctttcgtcc gcacccgtgt gaccgtcgcc ggggtgtccc tcaagaccga gctgcgtgag
 420
 caggccaccg aggtgtgtgc cagcgttgac ggggtgacca gtgtttccgt cgaactcggc
 480
 accatgaccg acgaacagcg cgatgctctc aaagttcagc tgcgcggtga cgtccccgaa
 540
 cgcgt
 545

<210> 1482

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1482

Met	Ser	Thr	Glu	Asn	Pro	Val	Val	Lys	Ala	Ile	Ala	Asp	Ala	Leu	Ser
1				5				10						15	
His	Val	Asn	Asp	Pro	Glu	Ile	Lys	Arg	Pro	Ile	Thr	Asp	Leu	Asn	Met
		20					25						30		
Ile	Asp	Glu	Ile	Thr	Val	Asp	Glu	Gln	Gly	Arg	Ala	Phe	Val	Arg	Ile
		35					40					45			
Leu	Leu	Thr	Val	Ala	Gly	Cys	Pro	Leu	Lys	Thr	Glu	Leu	Arg	Glu	Gln
		50				55					60				
Ala	Thr	Glu	Ala	Val	Arg	Ser	Val	Asp	Gly	Val	Thr	Ser	Val	Ser	Val
65					70					75				80	
Glu	Leu	Gly	Thr	Met	Thr	Asp	Glu	Gln	Arg	Asp	Ala	Leu	Lys	Val	Gln
				85					90					95	
Leu	Arg	Gly	Asp	Val	Pro	Glu	Arg								
				100											

<210> 1483

<211> 625

<212> DNA

<213> Homo sapiens

<400> 1483

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 60

ttggaggttaa agctggtgct gctgtggaaa cacaacatgc gcattgagta tgtggctatg
 120
 gcacccctggc ccctggagcc tgagggccct cgagtaacac ggggtggaagt gacgatggaa
 180
 ggcggctacg acattttgca tgatgtgtcc tgtgcactaa ggcagcccat tcgttcattg
 240
 tatcgtaccc atgttatccg gcgtttctgg aacacgctgc agagcatcaa ccagacagac
 300
 cagatgcttg ccacacctca gtccttctcc tcagtgcctg agcatttcac gcttctgac
 360
 agcaccaaga gcggagtgcc actcttctac atccctccag gctccaccac cccggtgctc
 420
 tccctccagc ccagtgggtc tgactcatcc catgccagc ttgctgccta ctggaagccc
 480
 agtgcgtgcc atggatgcaa attcctggca gcgatggctg cacatgcac gctggtgct
 540
 aatcctggag catgacacac caatcccca gcaattgcac accccgggca gcaatgggag
 600
 ctactacgga gagaagacaa cgcgt
 625

<210> 1484

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1484

Val	Arg	Leu	Arg	Glu	Gly	Tyr	Ser	Val	Arg	Glu	Val	Thr	Leu	Ala	Lys
1				5					10					15	
Gly	Gly	Ser	Gln	Leu	Glu	Val	Lys	Leu	Val	Leu	Leu	Trp	Lys	His	Asn
			20					25					30		
Met	Arg	Ile	Glu	Tyr	Val	Ala	Met	Ala	Ser	Trp	Pro	Leu	Glu	Pro	Glu
		35					40					45			
Gly	Pro	Arg	Val	Thr	Arg	Val	Glu	Val	Thr	Met	Glu	Gly	Gly	Tyr	Asp
	50					55					60				
Ile	Leu	His	Asp	Val	Ser	Cys	Ala	Leu	Arg	Gln	Pro	Ile	Arg	Ser	Leu
65					70				75					80	
Tyr	Arg	Thr	His	Val	Ile	Arg	Arg	Phe	Trp	Asn	Thr	Leu	Gln	Ser	Ile
			85					90						95	
Asn	Gln	Thr	Asp	Gln	Met	Leu	Ala	His	Leu	Gln	Ser	Phe	Ser	Ser	Val
			100				105					110			
Pro	Glu	His	Phe	Thr	Leu	Pro	Asp	Ser	Thr	Lys	Ser	Gly	Val	Pro	Leu
		115					120					125			
Phe	Tyr	Ile	Pro	Pro	Gly	Ser	Thr	Thr	Pro	Val	Leu	Ser	Leu	Gln	Pro
	130					135					140				
Ser	Gly	Ser	Asp	Ser	Ser	His	Ala	Gln	Phe	Ala	Ala	Tyr	Trp	Lys	Pro
145					150				155					160	
Ser	Ala	Val	His	Gly	Cys	Lys	Phe	Leu	Ala	Ala	Met	Ala	Ala	His	Ala
			165					170						175	
Ser	Pro	Gly	Ala	Asn	Pro	Gly	Ala								
			180												

<210> 1485

<211> 2058

<212> DNA

<213> Homo sapiens

<400> 1485

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60
ctgttcctgc cacagtcacg acccagacta tttatcattg gtgtcagaaa cgatattttt
120
gttggcgata ttactttctga atcacctctt aaaatgtggc ataccagaac tttattgaat
180
gcctacagca atctgaaaga tgatgccaaag tccaattggg tatgggtggga ccttcctatg
240
ccagcccaga gaaaatctgc tttcgccgat ttgattgaag aaaatcctag cagcggttaag
300
tggcataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct
360
aaggttgagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt
420
tataaaagaa ctgcgaccga tagcttttga gttaaagcgc agcgtgctga agtgcggttt
480
gatgatgttg ccggttgtct tcgcaccctt ggaggggggt caagtcggca agtcataatg
540
gtcgttgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt
600
atgggggttac ccgacgaata catattgcc aaaaattata atgaggcgta tcacttaacg
660
ggtgatggtg ttgtagtgcc gggtgtatcc cacatagcca ctcatatttt tgaccagtg
720
atggagcgtg tgtttgagga tgcggcgagg ctgcttaagc aaatcgcata gcatcgtttt
780
ggcaggaaga tatgagcgtt attccgtgta aaaaggacct tcagctaaaa aaattgattg
840
aatcctatgc agaagccttg aaagttgagg ccataagct aggagagcat ggattaactg
900
aagctgaatt ttatgatagc ggccctcttc ggggggctat cgagcgaatt cgaggacagt
960
tctccgcgac catgcgggag aaaagaaatt tcgttaagca tgttttaaat tacatgcagg
1020
ataacgacta cattgctgat tgggagtcgg ctggtgaatc gaatcgccat gattatatgg
1080
taacttctaa ttctgggcgc aaagctgcta ttgagctgaa aggggtgcctt gatggcaata
1140
acactaacat ctttgatcgc cccctcagg cagaagaatt tggtatctgg agtgtatgca
1200
caaacctgg tgctgacct cagcataatg tttggtctgg gcttcacacc agactaagtg
1260
ctgaaatcat ttcacgggag caaaggattg atggaatggt catttgggac tgggcttgtg
1320
gaacagtcgg aaggccatgc cccaaaatag caactgaacc tgagcgggct gtaacatttg
1380
ggccgttcaa attgccgcca ccatgtttgt atcttttacc ttcgacgatt ccaagcccaa
1440
gaaacaaccc gtctccaaga gctcagcaga ttgaagacgt gcagctaata aaagcgtttc
1500

acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttggttattc
 1560
 atggtaaaga taccgtccgt aaaacgacta tcattcgaaa cggcatgggtg gagcgtgaat
 1620
 cggaatatgac ggcaataagg cgggtcttaat ttgtgcatgc ctatgctgca tgaatccgca
 1680
 tgatcgtttg aggatcgttt ttgctgaggg ccgccagttc tgggtgggctt ttgcttatgt
 1740
 catgcacctg catgaaaacc gctacataaa gcgggcaggc gtggcgggga tacgagcgcg
 1800
 cgcaacgggg tgaaatgggtg aatatcaggg gcaatctccg gcacgctggc ggcttgaatc
 1860
 gggtaggggtg agtgagaggg agcaataaag aagcgccccg cagaatgctg ctggggcgct
 1920
 gtgagaggtg gtcttgttgt cgcggtgcgg tgggtcagtc gtagcgattg tcttctgtca
 1980
 gccccagcgt gtacggctca aagcggatca cttcttcgcc cagccagtca ttaagctccc
 2040
 gcagtcgctt ctgcaggc
 2058

<210> 1486

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1486

Xaa	Cys	Ser	Ala	Phe	Asn	Asp	Ile	Gly	Tyr	His	Tyr	Gly	Ala	Met	Val
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Val	Asp	Ala	Ala	Leu	Phe	Leu	Pro	Gln	Ser	Arg	Pro	Arg	Leu	Phe	Ile
		20						25					30		
Ile	Gly	Val	Arg	Asn	Asp	Ile	Phe	Val	Gly	Asp	Ile	Thr	Ser	Glu	Ser
		35				40						45			
Pro	Ser	Lys	Met	Trp	His	Thr	Arg	Thr	Leu	Leu	Asn	Ala	Tyr	Ser	Asn
		50				55					60				
Leu	Lys	Asp	Asp	Ala	Lys	Ser	Asn	Trp	Val	Trp	Trp	Asp	Leu	Pro	Met
65					70				75					80	
Pro	Ala	Gln	Arg	Lys	Ser	Ala	Phe	Ala	Asp	Leu	Ile	Glu	Glu	Asn	Pro
			85					90						95	
Ser	Ser	Val	Lys	Trp	His	Thr	Arg	Lys	Glu	Thr	Gln	Gln	Leu	Leu	Asp
		100						105					110		
Met	Met	Thr	Asp	Val	Asn	Leu	Ala	Lys	Val	Glu	Ala	Ala	Lys	Lys	Leu
		115					120					125			
Ser	Ile	Glu	Ser	Lys	Glu	Asn	Val	Val	Gly	Thr	Ile	Tyr	Lys	Arg	Thr
		130				135					140				
Arg	Thr	Asp	Ser	Phe	Gly	Val	Lys	Ala	Gln	Arg	Ala	Glu	Val	Arg	Phe
145					150					155				160	
Asp	Asp	Val	Ala	Gly	Cys	Leu	Arg	Thr	Pro	Gly	Gly	Gly	Ser	Ser	Arg
			165						170					175	
Gln	Val	Ile	Met	Val	Val	Asp	Asn	Gly	Thr	Val	Lys	Thr	Arg	Leu	Ile
			180					185					190		
Ser	Ser	Arg	Glu	Thr	Ala	Arg	Leu	Met	Gly	Leu	Pro	Asp	Glu	Tyr	Ile
		195					200					205			
Leu	Pro	Lys	Asn	Tyr	Asn	Glu	Ala	Tyr	His	Leu	Thr	Gly	Asp	Gly	Val

210	215	220
Val Val Pro Val Val Ser His Ile Ala Thr His Ile Phe Asp Pro Val		
225	230	235
Met Glu Arg Val Phe Glu Asp Ala Ala Gly Leu Leu Lys Gln Ile Ala		240
245	250	255

<210> 1487
 <211> 823
 <212> DNA
 <213> Homo sapiens

<400> 1487
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 60
 ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg
 120
 catcagggaa tgctggggaa aaaaagcact ccaggcccag ggatcagcaa agcacaggat
 180
 gcctggggga acacacagcc tcagagcatt tgaggaacag aaaaggcaac gtgactaagc
 240
 ttcttggggc ggtgaggtca ggcagggagg tgggtgagag gtcattggggc cgcaggcaaa
 300
 cggccctccc tcccagtgcc ccacatgcag gccctggagc accaggagcg gggaggctcc
 360
 gtggtgtgtc ttcttgcaag tggcctgcct ttgggagcat cagcccttcc ttctggggac
 420
 tgggagaggg cggcagttag ggaagaatgg ccctcggtcg tgcgtagaga atgtagggga
 480
 cacagggcct ctcacggacc cagatcctga tcttgtcaga tctgcacgcc cgtgggaggg
 540
 tgctggcggc agaaacgcgt tgccataagc cttctcccca ctgcaggcag gtgtggtcag
 600
 gggacctcct tggagaacaa ggtgggggaa tttggcagct ttctcagcat ggcgtccatc
 660
 cccctacat tcttggggca cccactgtag gccaggccct gtgccggatc tgatgataca
 720
 gtgatgacta agtcacagtc cctgcctctg agggccccc atgtgtgccg gacagccaag
 780
 caacccaata tgttaaaatc cagtgtcagg acccnaggag aag
 823

<210> 1488
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 1488
 Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu
 1 5 10 15
 Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu
 20 25 30
 Leu Gln Ala Ser Gly Asn Ala Gly Glu Lys Lys His Ser Arg Pro Arg
 35 40 45
 Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His


```

      50              55              60
Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg
65              70              75              80
Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala
      85              90              95
Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly
      100              105              110
Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile
      115              120              125
Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met
      130              135              140
Ala Leu Gly Arg Ala
145

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<210> 1489
 <211> 342
 <212> DNA
 <213> Homo sapiens

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<400> 1489
nnccagttca ccgtcaagct ggccgcggcc ggcgaacaca atgtgcgcaa tgcgctggcc
60
gcgattgcct gcgccgtggg tgccggcatc aaccaggacg ccatcgtgcg cggcctcgaa
120
gccttcgccc cggtcggcgg acgtttgcag cgcaagcagg ccgccagcgg cgcgcccgtc
180
attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc
240
cgcgtagccc gcgcgcgcgc cctgggtggtg ggcgacatgg gcgaagtcgg cgcacagggg
300
aaagaatttc acgaagaaat cggggcttac gcacacacgc gt
342

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<210> 1490
 <211> 114
 <212> PRT
 <213> Homo sapiens

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<400> 1490
Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg
1      5      10      15
Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln
      20      25      30
Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg
      35      40      45
Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr
      50      55      60
His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala
65      70      75      80
Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val
      85      90      95
Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His
      100      105      110
Thr Arg

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<210> 1491
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1491
 ncctcgttgt tctcatagag ggctacggca tcgcgtttga actgttcgga gtacctggac
 60
 atgggggtag attacctttc ttcccagctc gactgggctg gatatcaggt gtccaccaca
 120
 tggggggtcag gtcccactcc caaaggagta gccatcacc acgagtcggc ggtaataacg
 180
 attgtcgatg tcaacgaacg cctcgggggtg actccgaccg accggatatt ggggatttca
 240
 gagctaaact tcgatctatc ggtatacgac atcttcggga tgttcgcgcg ggggtgctacc
 300
 ttgggtgttg catctccagc agacaaacgt gat
 333

<210> 1492
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1492
 Met Gly Val Asp Tyr Leu Ser Ser Gln Leu Asp Trp Ala Gly Tyr Gln
 1 5 10 15
 Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile
 20 25 30
 Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu
 35 40 45
 Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe
 50 55 60
 Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr
 65 70 75 80
 Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp
 85 90

<210> 1493
 <211> 1316
 <212> DNA
 <213> Homo sapiens

<400> 1493
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 cccttgcccc cgaagccagg ccctgggtca ccctcccacc cgggtgccct tgacttggat
 120
 ggtgtttccc ggcagcagaa cgcggtgggc agggagaagg agctgctcag cagccagagg
 180
 gacgggcggt ttgaaggccg cccggtgccc gacggtgacg ccaagcagag atcaccaaag
 240

atgaggcaga gacccccctcc tcgccgggac atgaccattc ctcgaggcct caacctgccg
 300
 aagccgcccc tcccccccca agtggaggaa gagtattaca ccatcgccga attccagaca
 360
 accatcccag acggcatcag cttccaggca ggcctgaagg tcgagggtgat cgagaaaaac
 420
 ttgagtggct ggtggtacat tcagattgaa gataaggaag ggtgggcccc ggccaccttc
 480
 attgacaagt acaagaagac gagcaacgag tcgagacca actttctggc tccccctgcc
 540
 cagcaggtga cccagctccg gctgggggaa gcagcagcgc tggagaacaa cacgggcagc
 600
 gaagccacgg gccctcccg gccctgcct gacgcaccgc atggtgtcat ggactcgggg
 660
 ttgccatggt ctaaagactg gaagggcagt aaggatgtcc tgaggaaggc atcttcagac
 720
 atgtctgctg cagcaggcta cgaggagatc tcagaccccc acatggagga gaagcccagc
 780
 ctccctccgc ggaaagaatc catcatcaag tcggaggggg agctgctgga gcgggagcgg
 840
 gagcggcaga ggacggagca gctccggggc cccactcca agcctccggg cgtgattttg
 900
 ccgatgatgc cagccaaaca catccctcca gcccgggaca gcaggaggcc agagcccaaa
 960
 cctgacaaaa gcagactggt ccagctgaaa aatgacatgg ggctggagtg tggccacaag
 1020
 gtcttgcca aggaagtga gaagcccaac ctccggcca tctccaaatc caaaactgac
 1080
 ctgcccagagg agaagccaga tgccactccc cagaatccct tcttgaagtc cagacctcag
 1140
 gttaggccaa aaccagctcc ttccccaaa acggagccac ctcagggcga agaccaagtc
 1200
 gacatctgca acctcaggag taagctcagg cctgccaagt cccaagacaa gtccttgttg
 1260
 gatggggagg gccccaggc agtagggggc caagacgtgg ccttcagccg aagctt
 1316

<210> 1494

<211> 438

<212> PRT

<213> Homo sapiens

<400> 1494

Xaa	Tyr	Gln	Gly	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Ser	Tyr	Leu	Lys	Lys
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Asn	Ser	Gly	Glu	Pro	Leu	Pro	Pro	Lys	Pro	Gly	Pro	Gly	Ser	Pro	Ser
			20					25					30		
His	Pro	Gly	Ala	Leu	Asp	Leu	Asp	Gly	Val	Ser	Arg	Gln	Gln	Asn	Ala
			35				40				45				
Val	Gly	Arg	Glu	Lys	Glu	Leu	Leu	Ser	Ser	Gln	Arg	Asp	Gly	Arg	Phe
	50					55				60					
Glu	Gly	Arg	Pro	Val	Pro	Asp	Gly	Asp	Ala	Lys	Gln	Arg	Ser	Pro	Lys
65					70					75				80	
Met	Arg	Gln	Arg	Pro	Pro	Pro	Arg	Arg	Asp	Met	Thr	Ile	Pro	Arg	Gly

85								90					95				
Leu	Asn	Leu	Pro	Lys	Pro	Pro	Ile	Pro	Pro	Gln	Val	Glu	Glu	Glu	Tyr		
100								105				110					
Tyr	Thr	Ile	Ala	Glu	Phe	Gln	Thr	Thr	Ile	Pro	Asp	Gly	Ile	Ser	Phe		
115								120				125					
Gln	Ala	Gly	Leu	Lys	Val	Glu	Val	Ile	Glu	Lys	Asn	Leu	Ser	Gly	Trp		
130								135				140					
Trp	Tyr	Ile	Gln	Ile	Glu	Asp	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Thr	Phe		
145												155					
Ile	Asp	Lys	Tyr	Lys	Lys	Thr	Ser	Asn	Ala	Ser	Arg	Pro	Asn	Phe	Leu		
				165								170					
Ala	Pro	Leu	Pro	His	Glu	Val	Thr	Gln	Leu	Arg	Leu	Gly	Glu	Ala	Ala		
				180								185					
Ala	Leu	Glu	Asn	Asn	Thr	Gly	Ser	Glu	Ala	Thr	Gly	Pro	Ser	Arg	Pro		
				195								200					
Leu	Pro	Asp	Ala	Pro	His	Gly	Val	Met	Asp	Ser	Gly	Leu	Pro	Trp	Ser		
				210								215					
Lys	Asp	Trp	Lys	Gly	Ser	Lys	Asp	Val	Leu	Arg	Lys	Ala	Ser	Ser	Asp		
				225								230					
Met	Ser	Ala	Ser	Ala	Gly	Tyr	Glu	Glu	Ile	Ser	Asp	Pro	Asp	Met	Glu		
				245								250					
Glu	Lys	Pro	Ser	Leu	Pro	Pro	Arg	Lys	Glu	Ser	Ile	Ile	Lys	Ser	Glu		
				260								265					
Gly	Glu	Leu	Leu	Glu	Arg	Glu	Arg	Glu	Arg	Gln	Arg	Thr	Glu	Gln	Leu		
				275								280					
Arg	Gly	Pro	Thr	Pro	Lys	Pro	Pro	Gly	Val	Ile	Leu	Pro	Met	Met	Pro		
				290								295					
Ala	Lys	His	Ile	Pro	Pro	Ala	Arg	Asp	Ser	Arg	Arg	Pro	Glu	Pro	Lys		
				305								310					
Pro	Asp	Lys	Ser	Arg	Leu	Phe	Gln	Leu	Lys	Asn	Asp	Met	Gly	Leu	Glu		
				325								330					
Cys	Gly	His	Lys	Val	Leu	Ala	Lys	Glu	Val	Lys	Lys	Pro	Asn	Leu	Arg		
				340								345					
Pro	Ile	Ser	Lys	Ser	Lys	Thr	Asp	Leu	Pro	Glu	Glu	Lys	Pro	Asp	Ala		
				355								360					
Thr	Pro	Gln	Asn	Pro	Phe	Leu	Lys	Ser	Arg	Pro	Gln	Val	Arg	Pro	Lys		
				370								375					
Pro	Ala	Pro	Ser	Pro	Lys	Thr	Glu	Pro	Pro	Gln	Gly	Glu	Asp	Gln	Val		
				385								390					
Asp	Ile	Cys	Asn	Leu	Arg	Ser	Lys	Leu	Arg	Pro	Ala	Lys	Ser	Gln	Asp		
				405								410					
Lys	Ser	Leu	Leu	Asp	Gly	Glu	Gly	Pro	Gln	Ala	Val	Gly	Gly	Gln	Asp		
				420								425					
Val	Ala	Phe	Ser	Arg	Ser												
				435													

<210> 1495

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1495

agatctctgt cccgtagagg tgccacctca tcctccatga gagctgtgct ttgctttctt

60

ctggaggctg caaggaggat ggcccccatc acggcggacc tacatgctgg gagtccggga
120
gagggcaggc cgcgacatg gggcatgtgg cgatgtgtt caccaccac tccgcctga
180
agtgccactg tgagcccaac ccacggtgcc aggctgggct gcactccagg ctctgcagc
240
agaccacct cctcagcctc cttcccctga aggctgggca tggcctggac aaagggtgtc
300
ctctctgct gtgccatgct gacgtggca
329

<210> 1496

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1496

Met	Ala	Gln	Gln	Arg	Arg	Thr	Pro	Phe	Val	Gln	Ala	Met	Pro	Ser	Leu
1				5					10					15	
Gln	Gly	Lys	Glu	Ala	Glu	Glu	Val	Gly	Leu	Leu	Gln	Glu	Pro	Gly	Val
			20					25					30		
Gln	Pro	Ser	Leu	Ala	Pro	Trp	Val	Gly	Leu	Thr	Val	Ala	Leu	Gln	Ala
		35					40					45			
Gly	Val	Gly	Gly	Glu	Thr	His	Arg	His	Met	Pro	His	Val	Arg	Gly	Leu
	50					55					60				
Pro	Ser	Pro	Gly	Leu	Pro	Ala	Cys	Arg	Ser	Ala	Val	Met	Gly	Ala	Ile
65					70					75				80	
Leu	Leu	Ala	Ala	Ser	Arg	Arg	Lys	Gln	Ser	Thr	Ala	Leu	Met	Glu	Asp
			85					90					95		
Glu	Val	Ala	Pro	Leu	Arg	Asp	Arg	Asp							
			100					105							

<210> 1497

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1497

naacttcttg cactcactca ggcgacaggt tggcggccga cttggaagcc gctgcagcac
60
ttgacgcggg gcgatctcga agcgttcggt cttggcctga cggtcgatgg ctgcggcgtg
120
ccgttgatcg cgcaatgcg acgggtgggg cagggcgtgc ggccgacacc accgcaagaa
180
cgcaactcac ggcagatgaa tctgttttga aacgcaagga agggtaatga caggcaccga
240
caagaagcgg atcccgcagc tgctgcgtgt tgagctcact gaacttaccg gcccgatcga
300
gcagccttac gcgcccgatg cacgtcattc tttcgggcca cgcgt
345

<210> 1498

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1498

```

Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1           5           10           15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
      20           25           30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
      35           40           45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
      50           55           60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
65           70           75           80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ala Ser Lys
      85           90           95
Ser Ala Ala Asn Arg Ala Pro Glu
      100

```

<210> 1499

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1499

```

aaatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
60
agtttccgtc tatgcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctcgccggt ttggttgcat tctttggctg
180
gatgcacaat cacaaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgagg agtattttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatattt atgcgaccga aagtctgttt
360
aatctgggga ttcattccagc acaaccggcc tcgactttaa gc
402

```

<210> 1500

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1500

```

Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1           5           10           15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
      20           25           30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
      35           40           45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
      50           55           60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```



```

65          70          75          80
Phe Asn Ala Glu Tyr Leu Phe Glu Lys Leu Lys Asn Lys Lys Val Gly
      85          90          95
Thr Lys Val Ala Ile Met Asp Asn His Val Val Val Gly Val Gly Asn
      100         105         110
Ile Tyr Ala Thr Glu Ser Leu Phe Asn Leu Gly Ile His Pro Ala Gln
      115         120         125
Pro Ala Ser Thr Leu Ser
      130

```

<210> 1501
 <211> 362
 <212> DNA
 <213> Homo sapiens

```

<400> 1501
nnacgcgtgc atgctgcagg catcatccat cgcgatctga agccccaaaa catcttctcg
60
gtgccgagcg cgcgcgagcg cgacttcgtg aagatcttcg acttcggcgc atgccagatg
120
gtcacaccga aggtatcgaa cggcgtgccc gagctgaaga cgagcgcggg aaatctcttc
180
ggcacggtgc cgtacatggc gccggagtgc ttcgaggacg gctcgaccg gctggatgcg
240
cgcgcggaaca tctactccac gggcatcatc atgtaccgct gcgtgacggg gacgctcccc
300
ttcaaggcga acaccgtctt cgagatgctc atccatctgc gcgagggcgc cccatcaagc
360
tt
362

```

<210> 1502
 <211> 120
 <212> PRT
 <213> Homo sapiens

```

<400> 1502
Xaa Arg Val His Ala Ala Gly Ile Ile His Arg Asp Leu Lys Pro Gln
1          5          10          15
Asn Ile Phe Leu Val Pro Ser Ala Arg Glu Arg Asp Phe Val Lys Ile
      20          25          30
Phe Asp Phe Gly Ala Cys Gln Met Val Thr Pro Lys Val Ser Asn Gly
      35          40          45
Val Pro Glu Leu Lys Thr Ser Ala Gly Asn Leu Phe Gly Thr Val Pro
      50          55          60
Tyr Met Ala Pro Glu Cys Phe Glu Asp Gly Ser His Arg Leu Asp Ala
65          70          75          80
Arg Ala Asp Ile Tyr Ser Thr Gly Ile Ile Met Tyr Arg Cys Val Thr
      85          90          95
Gly Thr Leu Pro Phe Lys Ala Asn Thr Val Phe Glu Met Leu Ile His
      100         105         110
Leu Arg Glu Gly Arg Pro Ser Ser
      115         120

```


<210> 1503
 <211> 623
 <212> DNA
 <213> Homo sapiens

<400> 1503
 gccggcgtga ggcagagaaa cgtcctcgcc ctgtcattcc accctgaaga gactgacgac
 60
 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcaa
 120
 gggctcatga cgaccctcc tgaacactgt tcaaagggcg acggcttacc attcctcgct
 180
 gtgagtcctg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc
 240
 cgcacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag
 300
 ctgcatgatg gggaacaccg ccacgaggtc atcgatgcga tggcctcgtg gtggtgccag
 360
 attcacggtt accgaaaccc ggtcctcgac gaggcctca accgtcaaag ctcccagttc
 420
 agtcacgtca tgtttgccgg actcaccat aaggccgcgg ttgacgccgt catatcccta
 480
 gtgcgcctgg ccccggggcc cctcgaccgg atcttctctg ctgattccgg gtctgtcggc
 540
 gtcgaggtga gtctcaaatt ggctcgtcag gtgcaaatcg ctgcaccgc agcgcgccgg
 600
 ggcactttga cgaggacacg cgt
 623

<210> 1504
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 1504
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe
 1 5 10 15
 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His
 20 25 30
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala
 35 40 45
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His
 50 55 60
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His
 65 70 75 80
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser
 85 90 95
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val
 100 105 110
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg
 115 120 125
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys
 130 135 140
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr

1244

130	135	140
Gly Gln Leu Ala Asp Gly Ile Asp Gln Phe Thr Gly Asn Leu Val Gly		
145	150	155
Tyr Arg Thr Glu Ile Arg Gln Tyr Ala		160
165		

<210> 1507

<211> 667

<212> DNA

<213> Homo sapiens

<400> 1507

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agatctctta agatgtgctc attatcatga gaacagcgtg gaggaaacca cccccaggat
60
ccagttacct ccacttgtec tgccttggc acgtggggct tatggggatt acaattcaag
120
gtgagacttg ggtggggaca cagtggaaca tgaagtgtgc cacgctgggt ggatgacgcc
180
ctcctcccc cgccaccgag agctgcaggc cacatgatc cttttgggta gcaactcggga
240
aagggcagaa tgtacaggaa cagagtgaga ttcgcagggc ctggggctga gggaggggac
300
gcactagagg aaggcaaagg ggagcctcct ggggtgtggg agcactttct gtcttggttt
360
tggtggtggc tgcacagtgg cccacacccg tcagagctca cctgcctgca cccaggccct
420
ccgtgcaccc tggcagccca gatgactgca ccagcccagg ggaggtggag gaatgccaca
480
cgcaccggta cctggggacc ggggggtctc ggtgatcatc ccgagctcca agacagaagc
540
tggaactacag ccgtgctgag tggaggggtt tggtggctgg gtgcccgcct cctattgctc
600
ctgcagactc tgggggtctc ggcgccccca gtggggcaat gtgggctgct gcaggggaact
660
cacgcgt
667

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<210> 1508

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1508

Met Tyr Arg Asn Arg Val Arg Phe Ala Gly Pro Gly Ala Glu Gly Gly		
1	5	10
Asp Ala Leu Glu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His		
20	25	30
Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser		
35	40	45
Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln		
50	55	60
Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly		
65	70	75
Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg		80

<212> DNA

<213> Homo sapiens

<400> 1511

```

gccggcaccg gcgtaaggc catggcgctg ggcccgggat gggtaacac cgaattccac
60
tcacgcgcca acgtcaccgg caaccatctg ccggactttt tctggatcga cgccgaagtt
120
ctggtagcgc aggctctcaa cgaccttgac catgacaagg tagtatccat tcctaccccg
180
ctctggaagt tcttcatcgc agtggccaca catacccccac gttccgctat gagattcctg
240
tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctgcacacac tccgggagggc
300
gaggcctgag atggccagcg tcaaaccac taaggaccgg ggccggtaca ccaatgatct
360
gtccgccgcg acgcggcagg cagcgaacat gcttctgctg cgtcctttgg tgtggaaagt
420
cgtcaaagtg agcgtccacg gagccgacaa cctcgacggg ctgcacgggt ccttacgctg
480
ccgtcgctaa ccattcctcc cacctcgacg cgccgctcgt ttttggggcc cttcccaagc
540
ggctgtcaaa gtacctagct accggggccg ctgctgacta tttcttcacc gtctggtgga
600
aggccatcgc tccggtgctc ttcttcaacg cgt
633

```

<210> 1512

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1512

```

Ala Gly Thr Gly Val Lys Ala Met Ala Leu Gly Pro Gly Trp Val His
1           5           10           15
Thr Glu Phe His Ser Arg Ala Asn Val Thr Gly Asn His Leu Pro Asp
20           25           30
Phe Phe Trp Ile Asp Ala Glu Val Leu Val Arg Glu Ala Leu Asn Asp
35           40           45
Leu Asp His Asp Lys Val Val Ser Ile Pro Thr Pro Leu Trp Lys Phe
50           55           60
Phe Ile Ala Val Ala Thr His Thr Pro Arg Ser Ala Met Arg Phe Leu
65           70           75           80
Ser Arg Thr Leu Ser Ser Ser Arg Asp Lys Asp Asp His Pro Arg His
85           90           95
Thr Pro Gly Gly Glu Ala
100

```

<210> 1513

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1513

acgcgtgaag ggggtggaatt tcaccacaga ggggacgccg gggttcctgt tcagaaatat
 60
 ttggtcgtcc aatctcgtaa tgccttcttg aatgacttgc tgggcctgcc tcctgacacg
 120
 gctgtttcgc aggaaccgcc actcccgtc cttgcggatc tgactctcca ggtcgtgctc
 180
 ttctgggata ttcattgacgg gctgggtaaa atagccgggc gctccagtcg cagaaccccc
 240
 tctgcaccgt ggcggagatg aaacttttgt gtccagcagc atcgtccgcg tcgtccgcag
 300
 tctgctctgg gcccttgctg aacatcttcc gtgtccgggg gaactggtgg gagtgagggg
 360
 tgtactgcgc cccagcgggg cctgtggtgc ccggccggcc g
 401

<210> 1514
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1514
 Met Phe Asp Lys Gly Pro Glu Gln Thr Ala Asp Asp Ala Asp Asp Ala
 1 5 10 15
 Ala Gly His Lys Ser Phe Ile Ser Ala Thr Val Gln Thr Gly Phe Cys
 20 25 30
 Asp Trp Ser Ala Arg Leu Phe Tyr Pro Ala Arg His Glu Asp Pro Arg
 35 40 45
 Arg Ala Arg Pro Gly Glu Ser Asp Pro Gln Gly Ala Gly Val Ala Val
 50 55 60
 Pro Ala Lys Gln Pro Cys Gln Glu Ala Gly Pro Ala Ser His Ser Glu
 65 70 75 80
 Gly His Tyr Glu Ile Gly Arg Pro Asn Ile Ser Glu Gln Glu Pro Arg
 85 90 95
 Arg Pro Leu Cys Gly Glu Ile Pro Pro Leu His Ala
 100 105

<210> 1515
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 1515
 nnggatcctg accgcggcat gaggttcaac cctgccaaagc tattgctcga cccttatgcc
 60
 agggccatca cggcaggagt cgattatcac ggcccgatta tggaccacac gccggaatcc
 120
 aactacgagc ctgacctgac cgacgatgcg acgtcgggtc cgctcgccgt cgtcattgac
 180
 gatccccgcc cgcctacgcc tattgcgcgc cgccacgaca tcagcgaatc gggcatctat
 240
 gagacctatg tcaaagggct aaccgcctt caccctctcg ttctgagca tcttcgcagc
 300
 acctatgccg ggcttgccct tccggctgtt atcgaacacc tcaagtcaat cggagtaaca
 360

gccatcgaac tactacccgt ccagcagttc gtctccgaac cattcatcgt tgggcgcggc
 420
 ttatccgatt actgggggta caacaccctg gggttctttg cgccgcatgc tgcctactgc
 480
 tccgtcggct cgatgggaac ccaggtgcgc gagttcaagg acatgggtgac gtctttccac
 540
 gaagccggca tcgaggtttt cctcgatgtc gtctacaacc aactgggtga gggcggccat
 600
 gaaggaccga ctctgtcttt ccgcggcatc gatcacgagt cttattaccg cctcaccaac
 660
 gatcacgcga atgactatga cgtcaccggt tgtggcaatt ctgtcgacac ctcccatccg
 720

<210> 1516

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1516

Xaa	Asp	Pro	Asp	Arg	Gly	Met	Arg	Phe	Asn	Pro	Ala	Lys	Leu	Leu	Leu
1				5					10					15	
Asp	Pro	Tyr	Ala	Arg	Ala	Ile	Thr	Ala	Gly	Val	Asp	Tyr	His	Gly	Pro
			20					25					30		
Ile	Met	Asp	His	Thr	Pro	Glu	Ser	Asn	Tyr	Glu	Pro	Asp	Leu	Thr	Asp
		35				40					45				
Asp	Ala	Thr	Ser	Val	Pro	Leu	Ala	Val	Val	Ile	Asp	Asp	Pro	Gly	Pro
	50					55				60					
Pro	Thr	Pro	Ile	Ala	Arg	Arg	His	Asp	Ile	Ser	Glu	Ser	Gly	Ile	Tyr
65				70				75						80	
Glu	Thr	His	Val	Lys	Gly	Leu	Thr	Arg	Leu	His	Pro	Leu	Val	Pro	Glu
			85					90					95		
His	Leu	Arg	Ser	Thr	Tyr	Ala	Gly	Leu	Ala	Tyr	Pro	Ala	Val	Ile	Glu
		100				105						110			
His	Leu	Lys	Ser	Ile	Gly	Val	Thr	Ala	Ile	Glu	Leu	Leu	Pro	Val	Gln
	115					120					125				
Gln	Phe	Val	Ser	Glu	Pro	Phe	Ile	Val	Gly	Arg	Gly	Leu	Ser	Asp	Tyr
	130					135				140					
Trp	Gly	Tyr	Asn	Thr	Leu	Gly	Phe	Phe	Ala	Pro	His	Ala	Ala	Tyr	Cys
145				150				155						160	
Ser	Val	Gly	Ser	Met	Gly	Thr	Gln	Val	Arg	Glu	Phe	Lys	Asp	Met	Val
			165					170					175		
Thr	Ser	Phe	His	Glu	Ala	Gly	Ile	Glu	Val	Phe	Leu	Asp	Val	Val	Tyr
		180					185					190			
Asn	His	Thr	Gly	Glu	Gly	Gly	His	Glu	Gly	Pro	Thr	Leu	Ser	Phe	Arg
	195					200						205			
Gly	Ile	Asp	His	Glu	Ser	Tyr	Tyr	Arg	Leu	Thr	Asn	Asp	His	Arg	Asn
	210					215					220				
Asp	Tyr	Asp	Val	Thr	Gly	Cys	Gly	Asn	Ser	Val	Asp	Thr	Ser	His	Pro
225					230					235					240

<210> 1517

<211> 497

<212> DNA

<213> Homo sapiens

<400> 1517

nnacgcgtga aggggggttcg ggaggaggac gccctgctgg agaacgggag ccagagcaac
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 gaaagtgacg acgtcagcac agaccgtggc cctgcgccac cttccccgct caaggagacc
 120
 tcctttttcca tcgggctgca agtactgttt ccattcctcc tggcaggctt tgggaccgtg
 180
 gctgctggca tgggtgttga catcgtgcag cactgggaag tcttccagaa ggtgacagag
 240
 gtcttcatcc tagtgctgc gctgctgggg ctcaaaggga acctggaaat gaccctggca
 300
 tcaaggcttt ccaactgcagc caacattgga cacatggaca cacccaagga gctctggcgg
 360
 atgatcactg ggaacatggc cctcatccag gtgcaggccc cgggtgtggg ctctctggcg
 420
 tccatgcag ccgtcgtctt tggctggatc cctgatggcc acttcagtat tccgcaagcc
 480
 ttctgctct gtggtag
 497

<210> 1518

<211> 165

<212> PRT

<213> Homo sapiens

<400> 1518

Xaa	Arg	Val	Lys	Gly	Val	Arg	Glu	Glu	Asp	Ala	Leu	Leu	Glu	Asn	Gly
1				5					10					15	
Ser	Gln	Ser	Asn	Glu	Ser	Asp	Asp	Val	Ser	Thr	Asp	Arg	Gly	Pro	Ala
			20					25					30		
Pro	Pro	Ser	Pro	Leu	Lys	Glu	Thr	Ser	Phe	Ser	Ile	Gly	Leu	Gln	Val
			35				40					45			
Leu	Phe	Pro	Phe	Leu	Leu	Ala	Gly	Phe	Gly	Thr	Val	Ala	Ala	Gly	Met
	50					55				60					
Val	Leu	Asp	Ile	Val	Gln	His	Trp	Glu	Val	Phe	Gln	Lys	Val	Thr	Glu
65				70					75					80	
Val	Phe	Ile	Leu	Val	Pro	Ala	Leu	Leu	Gly	Leu	Lys	Gly	Asn	Leu	Glu
			85						90				95		
Met	Thr	Leu	Ala	Ser	Arg	Leu	Ser	Thr	Ala	Ala	Asn	Ile	Gly	His	Met
			100					105					110		
Asp	Thr	Pro	Lys	Glu	Leu	Trp	Arg	Met	Ile	Thr	Gly	Asn	Met	Ala	Leu
			115				120					125			
Ile	Gln	Val	Gln	Ala	Pro	Val	Val	Gly	Phe	Leu	Ala	Ser	Ile	Ala	Ala
	130					135					140				
Val	Val	Phe	Gly	Trp	Ile	Pro	Asp	Gly	His	Phe	Ser	Ile	Pro	His	Ala
145					150					155					160
Phe	Leu	Leu	Cys	Gly											
				165											

<210> 1519

<211> 2076

<212> DNA

<213> Homo sapiens

<400> 1519

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nnagatcttt gggggattca acgagtggaa aatgcacgat ttctttcacc agaagaaaat
60
gtgtgcaatg agatgttggg aaaatcccag tttgttgctt gtatggctac ttgtcattca
120
cttacaaaaa ttgaaggagt gctctctggg gatccacttg atctgaaaat gtttgaggct
180
attggatgga ttctggaaga agcaactgaa gaagaaacag cacttcataa tcgaattatg
240
cccacagtgg ttctgtcctcc caaacaactg cttcctgaat ctaccctgc aggaaaccaa
300
gaaatggagc tgtttgaact tccagctact tatgagatag gaattgttcg ccagttccca
360
ttttcttctg ctttgcaacg tatgagtgtg gttgccaggg tgctggggga taggaaaatg
420
gacgcctaca tgaagggagc gcccagaggc attgccggtc tctgtaaacc tgaaacagtt
480
cctgtcgatt ttcaaaacgt tttggaagac ttcactaaac agggcttcgg tgtgattgct
540
cttgcacaca gaaaattgga gtcaaaactg acatggcata aagtacagaa tattagcaga
600
gatgcaattg agaacaacat ggattttatg ggattaatta taatgcagaa caaattaaag
660
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720
acaggtgaca gtatgttgac tgctgtctct gtggccagag attgtggaat gattctacct
780
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840
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900
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960
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1020
aagtgtgatg tgcattggac cgtgtttgcc cgtatggcac ctgatcagaa gacacagttg
1080
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1140
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1200
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1260
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1320
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1380
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1440
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1500
ttctccgttt tgtctcagat tatcatctgc attggatttc aatctttggg ttttttttgg
1560

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gtcaaacagc aaccttggtg tgaagtgtgg catccaaaat cagatgcttg taatacaaca
 1620
 ggaagcgggt tttggaattc ttcacacgta gacaatgaaa ccgaacttga tgaacataat
 1680
 atacaaaatt atgaaaatac cacagtgttt tttattttcca gttttcagta cctcatagtg
 1740
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 1800
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 1920
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 1980
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 2040
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<210> 1520

<211> 692

<212> PRT

<213> Homo sapiens

<400> 1520

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Pro	Glu	Glu	Asn	Val	Cys	Asn	Glu	Met	Leu	Val	Lys	Ser	Gln	Phe	Val
			20					25					30		
Ala	Cys	Met	Ala	Thr	Cys	His	Ser	Leu	Thr	Lys	Ile	Glu	Gly	Val	Leu
		35					40					45			
Ser	Gly	Asp	Pro	Leu	Asp	Leu	Lys	Met	Phe	Glu	Ala	Ile	Gly	Trp	Ile
	50					55					60				
Leu	Glu	Glu	Ala	Thr	Glu	Glu	Thr	Ala	Leu	His	Asn	Arg	Ile	Met	
65					70				75					80	
Pro	Thr	Val	Val	Arg	Pro	Pro	Lys	Gln	Leu	Leu	Pro	Glu	Ser	Thr	Pro
				85					90					95	
Ala	Gly	Asn	Gln	Glu	Met	Glu	Leu	Phe	Glu	Leu	Pro	Ala	Thr	Tyr	Glu
			100					105					110		
Ile	Gly	Ile	Val	Arg	Gln	Phe	Pro	Phe	Ser	Ser	Ala	Leu	Gln	Arg	Met
		115					120						125		
Ser	Val	Val	Ala	Arg	Val	Leu	Gly	Asp	Arg	Lys	Met	Asp	Ala	Tyr	Met
		130				135					140				
Lys	Gly	Ala	Pro	Glu	Ala	Ile	Ala	Gly	Leu	Cys	Lys	Pro	Glu	Thr	Val
145					150					155				160	
Pro	Val	Asp	Phe	Gln	Asn	Val	Leu	Glu	Asp	Phe	Thr	Lys	Gln	Gly	Phe
				165					170					175	
Arg	Val	Ile	Ala	Leu	Ala	His	Arg	Lys	Leu	Glu	Ser	Lys	Leu	Thr	Trp
			180					185					190		
His	Lys	Val	Gln	Asn	Ile	Ser	Arg	Asp	Ala	Ile	Glu	Asn	Asn	Met	Asp
		195				200						205			
Phe	Met	Gly	Leu	Ile	Ile	Met	Gln	Asn	Lys	Leu	Lys	Gln	Glu	Thr	Pro
	210					215					220				
Ala	Val	Leu	Glu	Asp	Leu	His	Lys	Ala	Asn	Ile	Arg	Thr	Val	Met	Val


```

225          230          235          240
Thr Gly Asp Ser Met Leu Thr Ala Val Ser Val Ala Arg Asp Cys Gly
          245          250          255
Met Ile Leu Pro Gln Asp Lys Val Ile Ala Glu Ala Leu Pro Pro
          260          265          270
Lys Asp Gly Lys Val Ala Lys Ile Asn Trp His Tyr Ala Asp Ser Leu
          275          280          285
Thr Gln Cys Ser His Pro Ser Ala Ile Asp Pro Glu Ala Ile Pro Val
          290          295          300
Lys Leu Val His Asp Ser Leu Glu Asp Leu Gln Met Thr Arg Tyr His
305          310          315          320
Phe Ala Met Asn Gly Lys Ser Phe Ser Val Ile Leu Glu His Phe Gln
          325          330          335
Asp Leu Val Pro Lys Leu Met Leu His Gly Thr Val Phe Ala Arg Met
          340          345          350
Ala Pro Asp Gln Lys Thr Gln Leu Ile Glu Ala Leu Gln Asn Val Asp
          355          360          365
Tyr Phe Val Gly Met Cys Gly Asp Gly Ala Asn Asp Cys Gly Ala Leu
          370          375          380
Lys Arg Ala His Gly Gly Ile Ser Leu Ser Glu Leu Glu Ala Ser Val
385          390          395          400
Ala Ser Pro Phe Thr Ser Lys Thr Pro Ser Ile Ser Cys Val Pro Asn
          405          410          415
Leu Ile Arg Glu Gly Arg Ala Ala Leu Ile Thr Ser Phe Cys Val Phe
          420          425          430
Lys Phe Met Ala Leu Tyr Ser Ile Ile Gln Tyr Phe Ser Val Thr Leu
          435          440          445
Leu Tyr Ser Ile Leu Ser Asn Leu Gly Asp Phe Gln Phe Leu Phe Ile
          450          455          460
Asp Leu Ala Ile Ile Leu Val Val Val Phe Thr Met Ser Leu Asn Pro
465          470          475          480
Ala Trp Lys Glu Leu Val Ala Gln Arg Pro Pro Ser Gly Leu Ile Ser
          485          490          495
Gly Ala Leu Leu Phe Ser Val Leu Ser Gln Ile Ile Ile Cys Ile Gly
          500          505          510
Phe Gln Ser Leu Gly Phe Phe Trp Val Lys Gln Gln Pro Trp Tyr Glu
          515          520          525
Val Trp His Pro Lys Ser Asp Ala Cys Asn Thr Thr Gly Ser Gly Phe
          530          535          540
Trp Asn Ser Ser His Val Asp Asn Glu Thr Glu Leu Asp Glu His Asn
545          550          555          560
Ile Gln Asn Tyr Glu Asn Thr Thr Val Phe Phe Ile Ser Ser Phe Gln
          565          570          575
Tyr Leu Ile Val Ala Ile Ala Phe Ser Lys Gly Lys Pro Phe Arg Gln
          580          585          590
Pro Cys Tyr Lys Asn Tyr Phe Phe Val Phe Ser Val Ile Phe Leu Tyr
          595          600          605
Ile Phe Ile Leu Phe Ile Met Leu Tyr Pro Val Ala Ser Val Asp Gln
          610          615          620
Val Leu Gln Ile Val Cys Val Pro Tyr Gln Trp Arg Val Thr Met Leu
625          630          635          640
Ile Ile Val Leu Val Asn Ala Phe Val Ser Ile Thr Val Glu Asn Phe
          645          650          655
Phe Leu Asp Met Val Leu Trp Lys Val Val Phe Asn Arg Asp Lys Gln

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660 665 670
 Gly Glu Tyr Arg Phe Ser Thr Thr Gln Pro Pro Gln Glu Ser Val Asp
 675 680 685
 Arg Trp Gly Lys
 690

<210> 1521
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1521
 acgcgtcaca gctgaagccc gcagtgatag ccgacgcaca agccgaatca ataacttgtg
 60
 tctgcacgcg ctgggcctca acgagtagtt cagcaaaagt aggcggaaca ggcgcaacga
 120
 gcgtaccatc cgatacacgc cagccttgac tgctgataca ccccagccac tgcgcatcag
 180
 tgatttcaat ggcggttaca cagtctggta tcggactgtc gatatcatcg taataggcga
 240
 tcacattccc atttgcacg tatgtgcga acttttgacc catgattatt atttcccga
 300
 tgcaaaccaa taaacagtgt tggcgcttga tgaatagccg ttctgcacca cggcggtaga
 360
 gagtggcgtc gac
 373

<210> 1522
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1522
 Met Gly Gln Lys Phe Ala Ala Tyr Asp Ala Asn Gly Asn Val Ile Ala
 1 5 10 15
 Tyr Tyr Asp Asp Ile Asp Ser Pro Ile Pro Asp Cys Val Thr Ala Ile
 20 25 30
 Glu Ile Thr Asp Ala Gln Trp Leu Gly Cys Ile Ser Ser Gln Gly Trp
 35 40 45
 Arg Val Ser Asp Gly Thr Leu Val Ala Pro Val Pro Pro Thr Phe Ala
 50 55 60
 Glu Leu Leu Val Glu Ala Gln Arg Val Gln Thr Gln Val Ile Asp Ser
 65 70 75 80
 Ala Cys Ala Ser Ala Ile Thr Ala Gly Phe Ser Cys Asp Ala
 85 90

<210> 1523
 <211> 525
 <212> DNA
 <213> Homo sapiens

<400> 1523
 nnacgcgtgc ggtcaatatg ccgccattcc cataagcgtc tgggtggcatg tttccagggc
 60

cagcatggca ccgatgccga gaggagacac aaaaaactgc ctctgacagc tcttgctcaa
 120
 aatatgcaag aagcatcgac tcagctggaa gactctctcc tggggaagat gctggagacg
 180
 tgtggagatg ctgagaatca gctggctctc gagctctccc agcacgaagt ctttggtgag
 240
 aaggagatcg tggaccctct gtacggcata gctgaggtgg agattcccaa catccagaag
 300
 cagaggaagc agcttgcaag attggtgtta gactgggatt cagtcagagc caggtggaac
 360
 caagctcaca aatcctcagg aaccaacttt caggggcttc catcaaaaat agataactcta
 420
 aaggaagga tggatgaagc tggaaataaa gtagaacagt gcaaggatca acttgcagca
 480
 gacatgtaca actttatggc caaagaaggg gagtatggca aattt
 525

<210> 1524

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1524

Xaa	Arg	Val	Arg	Ser	Ile	Cys	Arg	His	Ser	His	Lys	Arg	Leu	Val	Ala
1				5					10					15	
Cys	Phe	Gln	Gly	Gln	His	Gly	Thr	Asp	Ala	Glu	Arg	Arg	His	Lys	Lys
			20					25					30		
Leu	Pro	Leu	Thr	Ala	Leu	Ala	Gln	Asn	Met	Gln	Glu	Ala	Ser	Thr	Gln
			35				40					45			
Leu	Glu	Asp	Ser	Leu	Leu	Gly	Lys	Met	Leu	Glu	Thr	Cys	Gly	Asp	Ala
			50				55				60				
Glu	Asn	Gln	Leu	Ala	Leu	Glu	Leu	Ser	Gln	His	Glu	Val	Phe	Val	Glu
65					70					75					80
Lys	Glu	Ile	Val	Asp	Pro	Leu	Tyr	Gly	Ile	Ala	Glu	Val	Glu	Ile	Pro
				85				90						95	
Asn	Ile	Gln	Lys	Gln	Arg	Lys	Gln	Leu	Ala	Arg	Leu	Val	Leu	Asp	Trp
			100					105					110		
Asp	Ser	Val	Arg	Ala	Arg	Trp	Asn	Gln	Ala	His	Lys	Ser	Ser	Gly	Thr
		115					120					125			
Asn	Phe	Gln	Gly	Leu	Pro	Ser	Lys	Ile	Asp	Thr	Leu	Lys	Glu	Gly	Met
			130				135				140				
Asp	Glu	Ala	Gly	Asn	Lys	Val	Glu	Gln	Cys	Lys	Asp	Gln	Leu	Ala	Ala
145					150					155					160
Asp	Met	Tyr	Asn	Phe	Met	Ala	Lys	Glu	Gly	Glu	Tyr	Gly	Lys	Phe	
				165				170						175	

<210> 1525

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1525

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 120
 ctgcgttctt ccctggacta tgaatatgaa ctgccgatgg cccagatgaa ccggcggttta
 180
 tctggcatcg atacgggtctt tttgcttacc gatgaaaagt acggctacat cagctcatcg
 240
 ctgtgcaaac aggtcgcgca attcggcggt gaggtcaccg ggatgcttcg gatc
 294

<210> 1526

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1526

Val	His	Glu	Arg	Met	Asp	Leu	Ile	Arg	Gln	Ser	Val	Asp	Ala	Arg	Ile
1				5					10					15	
Asn	Val	Asp	Tyr	Trp	Ser	Gly	Leu	Leu	Val	Asp	Tyr	Thr	Ser	Gln	His
			20					25					30		
Gly	Val	Asp	Val	Leu	Val	Lys	Gly	Leu	Arg	Ser	Ser	Leu	Asp	Tyr	Glu
			35				40					45			
Tyr	Glu	Leu	Pro	Met	Ala	Gln	Met	Asn	Arg	Arg	Leu	Ser	Gly	Ile	Asp
			50			55					60				
Thr	Val	Phe	Leu	Leu	Thr	Asp	Glu	Lys	Tyr	Gly	Tyr	Ile	Ser	Ser	Ser
65					70					75				80	
Leu	Cys	Lys	Gln	Val	Ala	Gln	Phe	Gly	Gly	Glu	Val	Thr	Gly	Met	Leu
				85					90					95	

Arg Ile

<210> 1527

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1527

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 120
 acttcgcctt ggtgcacggg gttggcatga ccggcgagta cccttgggtg gtgcaccgcg
 180
 aagacattga cgcgctgggt tacgacggtg tggtcgaggc cggcatgacc atctgtgtgg
 240
 aaagctacat cggccacgac gacggcggcg aaggcgtgaa gctcgaagaa cagatctaca
 300
 tccacgaaca cagcatcgag ttgctctccg attatccgtt cgacccacgc ctgttgccgc
 360
 gctgaacgcg t
 371

<210> 1528

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1528

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Met Glu Met Leu Lys Ala Gly Arg Ser Phe Lys Glu Tyr Ala Glu Met
 1             5             10             15
Ala Trp Lys Ile Pro Glu His Tyr Lys Asn Asn Arg Tyr Phe Ala Leu
      20             25             30
Val His Gly Val Gly Met Thr Gly Glu Tyr Pro Trp Val Val His Arg
      35             40             45
Glu Asp Ile Asp Ala Leu Gly Tyr Asp Gly Val Phe Glu Ala Gly Met
      50             55             60
Thr Ile Cys Val Glu Ser Tyr Ile Gly His Asp Asp Gly Gly Glu Gly
65             70             75             80
Val Lys Leu Glu Glu Gln Ile Tyr Ile His Glu His Ser Ile Glu Leu
      85             90             95
Leu Ser Asp Tyr Pro Phe Asp Pro Arg Leu Leu Pro Arg
      100             105

```

<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

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naccgcgtggt gctcaccctc cgtgtgactc gcgctctgtc cggctcaggg ctgcacctcc
60
gtgggacttg cgctctgtcc ggctcagggc tcgacctccg tgggacttgc gctctgtccg
120
gctcaggggt cgccctccgt gggacttgcg ctctgtccgg ctcaggggtc gccctccgtg
180
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240
cagggctcgc cctccgtggg acttgcgctc tgtccggctc agggctcgcc ctccgtggga
300
tttgcgtct gtctggctca ggctgcgcag ggcaatggag gaacctcccg agcaggccca
360
gcggctcctt ccaccagcc cccatctccg gccggccatt tgtgaggccc tctgccactg
420
aggtgcactg ttccaattc ctcatcaca agctctacct tccacgagcc cagagcatga
480
acgcattcgg ccattggtcct caccactctg cgaggagcac agcctcttct ccaccgtcca
540
atagcgtgtt cctcctttcc caggcctcac agaatgtct gtccgcatcc tcccagcatt
600
ccattcacg
609

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<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

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Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu

```



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      1             5             10             15
Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala
      20             25             30
Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser
      35             40             45
Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val
      50             55             60
Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala
      65             70             75             80
Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Phe Ala Leu Cys Leu
      85             90             95
Ala Gln Ala Ala Gln Gly Asn Gly Gly Thr Ser Arg Ala Gly Pro Ala
      100            105            110
Ala Pro Ser Thr Gln Pro Pro Ser Pro Ala Gly His Leu
      115            120            125

```

<210> 1531

<211> 726

<212> DNA

<213> Homo sapiens

<400> 1531

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agcgttggac tgggacgccg acgctgaaaa agaagctgac gagtccttgg gggcgcccgc
120
acattcggca agcatgagga cggggagcat cgagaccgag acagctcggc gaaggaattt
180
cggggtggca ggcattggca aactagcttt ctgtgatcgg cgtgcgcggc cgggcaacaa
240
cagggcgctc tcaggtggtc ttcgggctcg acttcgtctc cgttcccggc accttcccag
300
tgccatggc caggtgggtc aagtcggggc ggatcagtc taccgctgcg ctacgctccg
360
gcttttcacc ggattccagc gctgggtgtg tcaccagcaa cctgacgcga ggattttagc
420
accccttcg cataccgcta tccagggcct ccacgacagc ggcaccgatg acgatcgcgt
480
tcaccgagcg cggcgttttc ggcagcttcc acatggggat cagaccatat tgatgcactg
540
gcgatecctt catacgcgag ccgccgatat ggcccccgag tgaggcccct cagttcgcgc
600
tgacgcatgc cgctctgcgc agcctgcaa cgttttcccg caacctcacc acacgtttgc
660
cgggttcggg gctggcgacg tgagccgtgt cacaagttca cgagctggct caccgctccg
720
cgagag
726

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<210> 1532

<211> 178

<212> PRT

<213> Homo sapiens

<400> 1532

Met Val Ile Gly Pro Ala Leu Asp Trp Asp Ala Asp Ala Glu Lys Glu
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 Ala Asp Glu Ser Leu Gly Ala Pro Ala His Ser Ala Ser Met Arg Thr
 20 25 30
 Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala
 35 40 45
 Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn
 50 55 60
 Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser
 65 70 75 80
 Arg His Leu Pro Ser Ala His Gly Gln Val Val Gln Val Gly Ala Asp
 85 90 95
 Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg
 100 105 110
 Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser
 115 120 125
 His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg
 130 135 140
 Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr
 145 150 155 160
 Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala
 165 170 175
 Pro Glu

<210> 1533

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1533

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 120
 gttaaaatgc acgtcggtt gccgttcag gcggtcggtc ttatcggcga agacagcgat
 180
 ggcgattaca ttatggcgat gtcgaccag taccacgtca atcgccagcg ggtacagcgc
 240
 accacgtttg cccccacgtc gatgtcgcag gtgatgaccg atccactgg gcagcgcacc
 300
 tttttccatt cgctgcgc caatcgctg ctcgatctcc ccgcctttga tcgactcgac
 360
 gcgt
 364

<210> 1534

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1534

Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

1				5				10					15				
Gly	Trp	Leu	Ala	Glu	Ile	Ile	His	Ser	Glu	Arg	Ala	Thr	Gly	Gly	Ala		
			20					25					30				
Pro	Leu	Asn	Val	Leu	Leu	Thr	Leu	Val	Lys	Met	His	Val	Gly	Leu	Pro		
		35					40					45					
Leu	Gln	Ala	Val	Gly	Leu	Ile	Gly	Glu	Asp	Ser	Asp	Gly	Asp	Tyr	Ile		
	50					55					60						
Met	Ala	Met	Leu	Asp	Gln	Tyr	His	Val	Asn	Arg	Gln	Arg	Val	Gln	Arg		
65					70					75				80			
Thr	Thr	Phe	Ala	Pro	Thr	Ser	Met	Ser	Gln	Val	Met	Thr	Asp	Pro	Thr		
			85					90					95				
Gly	Gln	Arg	Thr	Phe	Phe	His	Ser	Pro	Ala	Ala	Asn	Arg	Leu	Leu	Asp		
		100					105					110					
Leu	Pro	Ala	Phe	Asp	Arg	Leu	Asp	Ala									
		115					120										

<210> 1535

<211> 369

<212> DNA

<213> Homo sapiens

<400> 1535

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gaattcgggg ggctccggga atgaagtttc catttcgcaa gccttctgaa gcaaattccgc
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caatcccttg ggcccgcggt gcgtgccggc cagcggccag tcctggcccgc gaatgatcca
120
ctcgatatct tcggcagaca acgccagcag accggggccta tcgccgcggc ccatggctgc
180
aaaaaaaaactc ttcacagtct ggacattccc ttgtgtgtct atcgaaatct ctccatgtcc
240
tttacctggg atcgtgtccg atctcatcgg acgcgttgag gacctgctgg tgaggacggg
300
gtgtcgggtga ttcagccgat atcgactttg catggcgatg tcccagctgc cggagccggt
360
actggccac
369

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<210> 1536

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1536

Met	Gln	Ser	Arg	Tyr	Arg	Leu	Asn	His	Arg	His	Pro	Val	Leu	Thr	Ser		
1				5				10					15				
Arg	Ser	Ser	Thr	Arg	Pro	Met	Arg	Ser	Asp	Thr	Ile	Pro	Gly	Lys	Gly		
		20					25					30					
His	Gly	Glu	Ile	Ser	Met	Ser	Thr	Gln	Gly	Asn	Val	Gln	Thr	Val	Lys		
	35					40					45						
Ser	Phe	Ala	Ala	Met	Gly	Arg	Gly	Asp	Arg	Pro	Gly	Leu	Leu	Ala			
	50				55			60									
Leu	Ser	Ala	Glu	Asp	Ile	Glu	Trp	Ile	Ile	Pro	Gly	Gln	Asp	Trp	Pro		
65				70				75					80				
Leu	Ala	Gly	Thr	His	Arg	Gly	Pro	Gln	Gly	Leu	Ala	Asp	Leu	Leu	Gln		

				85					90					95
Lys	Ala	Cys	Glu	Met	Glu	Thr	Ser	Phe	Pro	Glu	Pro	Pro	Glu	Phe
			100					105					110	

<210> 1537

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1537

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ccactcgcgg cgcctcctga gccctctcgt gtgtcaggac gccagcatcc tgttcgtggt
60
ctcgggggctg ctgcacgtgt accagcggaa gatcggcagc caggaggaca cctgcttggt
120
cctcacgcgc cccgggggaga tgggtgggcca gctggccgtg ctcaccgagg agacctcgtc
180
ggcgtggttg agacactgac ccaccaggcc cgggcgacca cgttgcacgc cgttcgggac
240
tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgag gtac
294

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<210> 1538

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1538

Pro	Leu	Ala	Ala	Pro	Pro	Glu	Pro	Ser	Arg	Val	Ser	Gly	Arg	Gln	His
1				5				10						15	
Pro	Val	Arg	Val	Leu	Gly	Ala	Ala	Ala	Arg	Val	Pro	Ala	Glu	Asp	Arg
			20					25					30		
Gln	Pro	Gly	Gly	His	Leu	Leu	Val	Pro	His	Ala	Pro	Arg	Gly	Asp	Gly
		35					40					45			
Gly	Pro	Ala	Gly	Arg	Ala	His	Arg	Gly	Asp	Leu	Val	Gly	Val	Val	Glu
	50					55					60				
Thr	Leu	Thr	His	Gln	Ala	Arg	Ala	Thr	Thr	Val	His	Ala	Val	Arg	Asp
65					70					75				80	
Ser	Glu	Leu	Ala	Lys	Leu	Pro	Ala	Gly	Ala	Leu	Thr	Ser	Ile	Lys	Arg
				85					90					95	

Arg Tyr

<210> 1539

<211> 1015

<212> DNA

<213> Homo sapiens

<400> 1539

```

acgcgttcgg cgcgcaggca cagcatctc aacagatgtg gctgacaccc aaggcagtcg
60
gcctcagtgc cctgtcaccc acctagaacc tgttcacagc atgtcatccg ggctgctctg
120
gccttgactg gacatgatta tttatcctta cacaccgtgg ctgctctaca ggccaagaaa
180

```


caggctgctc agccagggtc aggagaaggt gggtcaggct ccccggggac ctcaggccct
 240
 gacgcaccc ggcctcacc taggcctcct ctgtcggggc agcctggctc agcagagccc
 300
 gggacacacg gctgaggcca cccaggctgg gccatcttgc ccctgttttg tgccccctac
 360
 tcagttctcc ttctgtcctg gctcagggtc aggccagtca agagggtggc tgagaagcag
 420
 gaggagcctc agagaccctc ccctcgaaag cactggggct tccacctcac aagcggcagg
 480
 ttgcgttttg gagctgctgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg
 540
 gttgccgac catcgctccag gcctggccca ggagccgggt aggaacctgg ggctgttgtg
 600
 caggggtcgc cgtctccagc tctctgccgt ggtgagggga ttgtgctgtg tgcacaccac
 660
 ctggctgcat cgaatccac catggcccag aggggtggacc tgtggctcct tggggggcca
 720
 gcatccccag tctaattgggt gccctgcca ctctcctgag ttcccggtga gagtcccccc
 780
 caacacctca gccttcacct ttctcagtta atcaaaagat tccaaaaaaa gcaaaccat
 840
 cagaacggct tctccaccg agtggtcagg ataaataatc atgtccagtc aaggccagag
 900
 cagcccgat gacatgctat gaacagggtt taggtgggtg acagggcact gagggcgact
 960
 gccttgggtg tcagccacat ctgttgagat gcgtgtgct gacggccgaa cgcgt
 1015

<210> 1540

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1540

His	Pro	Arg	Gln	Ser	Ala	Ser	Val	Pro	Cys	His	Pro	Pro	Arg	Thr	Cys
1				5				10					15		
Ser	Gln	His	Val	Ile	Arg	Ala	Ala	Leu	Ala	Leu	Thr	Gly	His	Asp	Tyr
			20					25					30		
Leu	Ser	Leu	His	Thr	Val	Ala	Ala	Leu	Gln	Ala	Lys	Lys	Gln	Ala	Ala
			35					40					45		
Gln	Pro	Gly	Ser	Gly	Glu	Gly	Gly	Ser	Gly	Ser	Pro	Gly	Thr	Ser	Gly
			50					55			60				
Pro	Asp	Ala	Ser	Trp	Pro	His	Pro	Arg	Pro	Pro	Leu	Ser	Gly	Gln	Pro
65						70				75				80	
Gly	Ser	Ala	Glu	Pro	Gly	Thr	His	Gly							

<210> 1541

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 1541

cgccgatcac ggggagcccc tcgactgcct cccagaacaa agtgggaaag ggaagcttag
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cccgcgctg ccgcctccga gcagcccgcc aggactctgg ctactggaga tgggcgcccc
120
gctatcgagg cgacgggtgc cggcggaccc gtccctggcc ctggacgcgc tgcccccgga
180
gctgctgggt caggtgctga gccacgtgcc ggccacgctc cttggacacg cgatgccgcc
240
cagtgtgccg cgcctggcgc gacatagtgg acgggcccac tgggaggctg ctgcaactgg
300
cccgcgaccg cagcgcgag ggccgagcac tctacgcagt ggctcaacgc tgctgccc
360
acaacgaaga caaagaggag ttcccgtgt gcgccctggc gcgctactga ctgcgcgcgc
420
ccttcggccg caatctcatc ttcaactcct gcggagagca gggcttcaga ggctgggagg
480
tggagcatgg cgggaacggc tgggccatag aaaagaacct aacaccggtg cctggggctc
540
cttcgcagac ctgcttcgtg acctctttcg aatggtgctc caagaggcag cttgtggacc
600
tggatgatga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg
660
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctccgg gtccgccttc
720
tggatgtgta tgaaaaggaa gtggtcaagt tctcagctc acctgaccg gtccttcagt
780
ggactgagag gggctgccga caggtctccc acgtcttcac caactttggc aagggcattc
840
gctacgtatc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg
900
cccttgtgac ccactccagt gtgagggtca ggatccgtct gtcctagcga ctggactact
960
gcctgacgtt gtcagtcaag accagccttg cagccagggt cagtggctca cacctgtggg
1020
atcctcccac tttggccttc caaaatgttg cgattatagg cgtgagccac tgtggctggc
1080
ctgaaatctt ctagtatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt
1140
caagctaacc aggcgtccgc tacttcagaa gagtgtactg tcgcatgggg agtctgtaac
1200
catgcttttc acttccactg catctctcgc tggctcaaaa cacgacagg gtgtccattg
1260
gacaacagag agtgggaatt ccaaaagtat gggcactagg aaaagacttc ttccatcaag
1320
cttaattggt ttgttattca tttaatgact ttccctgctg ttacctaatt acaaattgga
1380
tggaactgtg tttttttctg ctttgttttt tcagtttget gtttctgtag ccatattgta
1440
ttctgtgtca aataaagtcc agttggattc tggaaaaaaa aa
1482

<210> 1542

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1542

```

Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1           5           10           15
Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
          20           25           30
Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
          35           40           45
Glu Trp Glu Phe Gln Lys Tyr Gly His
 50           55

```

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

```

gctagcgatg ctactttaag gtatgcgaag ttggatgctg acgttgccctc ctatcggttg
60
gagtc aaacg gacgaacaag cgttcgaggt agctttaaat gcggg cgacg ccagaaagtt
120
acc aaagtcg gtgccgcgcc ttatgtttct cgaatggctc acgcgccgag gctacttget
180
ccacggctcg agccgagccg acctcgtttg ttttgaacct cgagcaccca aagacttcag
240
ccctgacgag ttcagcaaac gcaccgccgt tttcgctctc tcagatgggg tgtggcccc
300
cncnccnc c
311

```

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

```

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1           5           10           15
Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
          20           25           30
Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
          35           40           45
Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
          50           55           60
Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
          65           70           75           80
Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
          85           90           95

```

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1545

ccatggtgcg gccgtctggt aacgataggc aaatccttgc catgccacca attcttcctt
60
caacagtagt tggcgaatcc ttcgatgggc aagtcctgtg agcttgetca tctgacggat
120
cgtctctgtc tcaagcacct cgcctgtttc caggttcaag gcctggatag tgcgagtgtc
180
gtactggctg atcacttcca ccgagtgggc tgggtagccc cttgccattc gctttatgat
240
ctcaaccata gatgcatttg gcatgttcca gagcttgtac tccttaacga tctctctggc
300
gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtggtgatgt accgtccaga
360
ac
362

<210> 1546

<211> 92

<212> PRT

<213> Homo sapiens

<400> 1546

Met	Val	Lys	Ser	Cys	Glu	Leu	Ala	His	Leu	Thr	Asp	Arg	Leu	Cys	Leu
1				5					10					15	
Lys	His	Leu	Ala	Cys	Phe	Gln	Val	Gln	Gly	Leu	Asp	Ser	Ala	Ser	Val
			20					25					30		
Val	Leu	Val	Asp	His	Phe	His	Arg	Val	Val	Trp	Val	Ala	Pro	Cys	His
		35					40					45			
Ser	Leu	Tyr	Asp	Leu	Asn	His	Arg	Cys	Ile	Trp	His	Val	Pro	Glu	Leu
		50				55				60					
Val	Leu	Leu	Asn	Asp	Leu	Ser	Gly	Val	Val	Glu	Asn	Leu	His	Ala	Ile
65					70					75				80	
Val	Arg	Met	Gly	His	Cys	Gly	Asp	Val	Pro	Ser	Arg				
				85					90						

<210> 1547

<211> 429

<212> DNA

<213> Homo sapiens

<400> 1547

cgcgttgcca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcgttc
60
ctgccgcgtt cgggtgtggt cagcgccgtg tcggcgtgga acctggagcg cgagcgccgt
120
cgcaaactcg gcctgccggc ctggcactgg aagaacgccg tgctcagtgc ctggatgtac
180
agcgtggtgt tgtggggggt gatgattgtc tggttgggcg cggcggatgat tccgttcctg
240
atcattcagg gtgtctacgg gttctcggtt ctggaagtgg tcaactacgt cgagcactac
300
gggcttaaac gccagaagt gcccaacggt cgttatgaac ggtgttcgcc tcggcactcg
360

tggaacagca accggattgt caccaatatc tttctgttcc aacttcagcg gcattccgac
 420
 caccatgcc
 429

<210> 1548

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1548

Arg	Val	Ala	Thr	Pro	Glu	Asp	Pro	Ala	Ser	Ser	Arg	Leu	Gly	Glu	Ser
1			5					10					15		
Phe	Trp	Ala	Phe	Leu	Pro	Arg	Ser	Val	Trp	Phe	Ser	Ala	Val	Ser	Ala
		20					25					30			
Trp	Asn	Leu	Glu	Arg	Glu	Arg	Leu	Arg	Lys	Leu	Gly	Leu	Pro	Ala	Trp
	35					40					45				
His	Trp	Lys	Asn	Ala	Val	Leu	Ser	Ala	Trp	Met	Tyr	Ser	Val	Val	Leu
	50				55					60					
Trp	Gly	Val	Met	Ile	Val	Trp	Leu	Gly	Ala	Ala	Val	Ile	Pro	Phe	Leu
65				70				75						80	
Ile	Ile	Gln	Gly	Val	Tyr	Gly	Phe	Ser	Leu	Leu	Glu	Val	Val	Asn	Tyr
			85					90					95		
Val	Glu	His	Tyr	Gly	Leu	Lys	Arg	Gln	Lys	Leu	Pro	Asn	Gly	Arg	Tyr
		100					105					110			
Glu	Arg	Cys	Ser	Pro	Arg	His	Ser	Trp	Asn	Ser	Asn	Arg	Ile	Val	Thr
	115					120					125				
Asn	Ile	Phe	Leu	Phe	Gln	Leu	Gln	Arg	His	Ser	Asp	His	His	Ala	
	130					135					140				

<210> 1549

<211> 443

<212> DNA

<213> Homo sapiens

<400> 1549

gtcgacaggc tccaggggtc tgttttgtag tgcacccgct gtgggtgcaac atgcgtctgg
 60
 gcacaccagc gtcgcccgtt tcctgttgta gtctttcctc tctgactcca ggggtattgg
 120
 gtctttctgc cagcgcccat gcaactttgg cagcctggcc tgtctgctgg taagtggggc
 180
 agaatccctg cactccacca ttcttgggca aactccctc taggattttg gtctcccttt
 240
 tctctctggt ctttgaccac cgctaccag caaactcctc catctagacc agccagcatt
 300
 ggttttcttc actccccag ctgccgctg ggaggcgcca ctgcaaactt ccctggggtc
 360
 tccagctgc tcagagatcc ccatgccctt ccctgatcag ctcctgccc ggttctcatc
 420
 ccgacgggc tgcattgata ttc
 443

<210> 1550

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1550

```

Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu
 1           5           10           15
Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg
          20           25           30
Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly
          35           40           45
Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln
          50           55           60
Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu
65           70           75           80
Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala
          85           90           95
Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr Thr
          100          105          110
Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg
          115          120          125
Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser
          130          135

```

<210> 1551

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1551

```

ccatggatac cccacctctg gcactcaaca tgacttggct gccacacacc aggaaacctc
60
agaggagcag ccagctggcc aagcaccctt gccctgccc tgcgggctcc acaaaagctg
120
gaggagcaaa cgcagctcac ctctttttct gtccactgct tcagggccta cccctgtgct
180
ttggagatgg aacaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca
240
gtccttcctt ccatttggtc ctaacacagc ctcccagga gaccaggggc atcccnnnnc
300
cccnnc
306

```

<210> 1552

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1552

```

Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr
 1           5           10           15
Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys
          20           25           30
Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

```


[illegible]

```
<210> 1553
<211> 657
<212> DNA
<213> Homo sapiens
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<400> 1553
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60
acgctactca tcttgggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
120
aaggccaagg agatcatccc caaggccgac ctgcccagcc cccggaagga gttcagcgcc
180
tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gctccgagaa cgggggtctcc
240
aaggatgtct ggggtgtacga caccgtacat gaggaatggc ccaaggcggc gcccatgctg
300
attgcccgct ttggccatgg ctccagctgag ctggagaact gcctctatgt ggtggggggg
360
cacacatccc tggcaggggt cttcccggcc tcgccttctg tctccctgaa acaagtggag
420
aaatacgacc ctggggccaa caagtggatg atggtggccc ccttgcgga tggcgtcagc
480
aatgccgcag tgggtgagtgc caagctgaag ctctttgttt ttggaggaac cagcatccac
540
cgggacatgg tgtccaaggt ccagtgctat gaccctcgg agaacaggtg gacgatcaag
600
gccgagtgcc cccagccttg gcggtacaca gccgctgccg tcctgggcag ccagatc
657
```

```
<210> 1554
<211> 219
<212> PRT
<213> Homo sapiens
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```

<400> 1554
Ile Leu Gln Asn Asp Gly Val Val Thr Ser Pro Tyr Ser Arg Pro Arg
 1             5             10             15
Lys Ala Gly His Thr Leu Leu Ile Leu Gly Gly Gln Thr Phe Met Cys
          20             25             30
Asp Lys Ile Tyr Gln Val Asp His Lys Ala Lys Glu Ile Ile Pro Lys
      35             40             45
Ala Asp Leu Pro Ser Pro Arg Lys Glu Phe Ser Ala Ser Ala Ile Gly
      50             55             60
Cys Lys Val Tyr Val Thr Gly Gly Arg Gly Ser Glu Asn Gly Val Ser

```


65					70					75					80
Lys	Asp	Val	Trp	Val	Tyr	Asp	Thr	Val	His	Glu	Glu	Trp	Ser	Lys	Ala
				85					90					95	
Ala	Pro	Met	Leu	Ile	Ala	Arg	Phe	Gly	His	Gly	Ser	Ala	Glu	Leu	Glu
			100					105					110		
Asn	Cys	Leu	Tyr	Val	Val	Gly	Gly	His	Thr	Ser	Leu	Ala	Gly	Val	Phe
		115				120						125			
Pro	Ala	Ser	Pro	Ser	Val	Ser	Leu	Lys	Gln	Val	Glu	Lys	Tyr	Asp	Pro
	130				135					140					
Gly	Ala	Asn	Lys	Trp	Met	Met	Val	Ala	Pro	Leu	Arg	Asp	Gly	Val	Ser
145					150				155					160	
Asn	Ala	Ala	Val	Val	Ser	Ala	Lys	Leu	Lys	Leu	Phe	Val	Phe	Gly	Gly
			165					170					175		
Thr	Ser	Ile	His	Arg	Asp	Met	Val	Ser	Lys	Val	Gln	Cys	Tyr	Asp	Pro
		180					185					190			
Ser	Glu	Asn	Arg	Trp	Thr	Ile	Lys	Ala	Glu	Cys	Pro	Gln	Pro	Trp	Arg
	195					200					205				
Tyr	Thr	Ala	Ala	Ala	Val	Leu	Gly	Ser	Gln	Ile					
	210				215										

<210> 1555

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1555

```

acgcgtggga gctcgggaga gaggactctg cttctggggg ttgaaggtga gcgtgattct
60
ggaggagcct gccttgccggc gagcgtgtgt tgtggagagg atgcaggaca tgagtgatcc
120
tgtaagggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag
180
gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg
240
tgtgtgtaga gtggagggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt
300
gtagcatcct gtgttgggat tgggattn
328

```

<210> 1556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1556

Met	Leu	His	Ser	Ala	Ile	Ala	Ser	Val	Ser	His	Ala	His	Lys	Phe	Ala
1				5				10					15		
His	Leu	His	Ser	Thr	His	Thr	His	Ile	Ser	Arg	Ser	Thr	Ala	Leu	Ser
			20				25					30			
Leu	Ser	Phe	Lys	Ser	Gln	Thr	Gly	Gly	Ser	Pro	Pro	Arg	Pro	Thr	Leu
	35					40					45				
Ala	Asp	Phe	Gln	Thr	Ser	Arg	Gly	Thr	Leu	Asp	His	Pro	Tyr	Arg	Ile
	50				55				60						
Thr	His	Val	Leu	His	Pro	Leu	His	Asn	Thr	Arg	Ser	Pro	Gln	Gly	Arg

65 70 75 80
 Leu Leu Gln Asn His Ala His Leu Gln Thr Pro Glu Ala Glu Ser Ser
 85 90 95
 Leu Pro Ser Ser His Ala
 100

<210> 1557

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1557

gtgcacagac ttttcgagcg ggccattaag tggtttacgt ctgggatcgg ctccgctttc
 60
 tcgcattttt cggatcaggt caaattctgt gctcggcatt gacaggaaat tgacgtgtat
 120
 cagtcgattc tttgcagtgt ctggacggca ggctgaatag gctgaaagca ggacaactac
 180
 gaccatgccg caccatgtgg atcgtctacc gttttggcct tgccgccatt gccttgatcg
 240
 ccctgattgc gctgttcgtg tgccagtacc ggctatcggc caggctggcg cgccggaagc
 300
 gaagctcgat gggcagcagg cgcatgagga acccggcgcc attgaatcgt gaggcgctgg
 360
 cggagcgcgg cccgttcaaa tgcgacgcgt
 390

<210> 1558

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1558

Met Ala Pro Gly Ser Ser Cys Ala Cys Cys Pro Ser Ser Phe Ala Ser
 1 5 10 15
 Gly Ala Pro Ala Trp Pro Ile Ala Gly Thr Gly Thr Arg Thr Ala Gln
 20 25 30
 Ser Gly Arg Ser Arg Gln Trp Arg Gln Gly Gln Asn Gly Arg Arg Ser
 35 40 45
 Thr Trp Cys Gly Met Val Val Val Val Leu Leu Ser Ala Tyr Ser Ala
 50 55 60
 Cys Arg Pro Asp Thr Ala Lys Asn Arg Leu Ile His Val Asn Phe Leu
 65 70 75 80
 Ser Met Pro Ser Thr Glu Phe Asp Leu Ile Arg Lys Met Arg Glu Ser
 85 90 95
 Gly Ala Asp Pro Arg Arg Lys Pro Leu Asn Gly Pro Leu Glu Lys Ser
 100 105 110
 Val His

<210> 1559

<211> 556

<212> DNA

<213> Homo sapiens

<400> 1559

accggtggcg acggtatcgg tggcgcgctg atccttgcc t cgggaatcctt cgctgcagag
 60
 ggtgagtcga agcgacccag cgtccagggtg ggcgacccgt tcatggagaa gctgctcatc
 120
 gagtgcaccc ttgacctctt caacgccggg gtagttgagg ccttgcagga tttcggtgcc
 180
 gccggaatct cctgtgccac ctccgagctg gccagtgtg ggcgacgggtg catgcacgtc
 240
 gagctcgacc gcgttccgct gcgcgacccg aacctcgccc ctgaagagat cctcatgagc
 300
 gagtcccagg agcggatggc cgcgggtggtg cgccccgac agcttgaccg cttcatggag
 360
 atctgcgccc attgggggtgt cgctgccact gtcattggcg aggtcaccga caccggtcga
 420
 cttcacattg attggcaggg cgagcggatt gtcgacgtcg atccgcggac ggttgctcac
 480
 gacggaccgg ttctcgacat gccggccgcc cgtccgtggt ggattgatga gctcaacgag
 540
 aacgacgcta acgcgt
 556

<210> 1560

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1560

Thr	Gly	Gly	Asp	Gly	Ile	Gly	Gly	Ala	Ser	Ile	Leu	Ala	Ser	Glu	Ser
1				5					10					15	
Phe	Ala	Ala	Glu	Gly	Glu	Ser	Lys	Arg	Pro	Ser	Val	Gln	Val	Gly	Asp
			20					25				30			
Pro	Phe	Met	Glu	Lys	Leu	Leu	Ile	Glu	Cys	Thr	Leu	Asp	Leu	Phe	Asn
		35					40					45			
Ala	Gly	Val	Val	Glu	Ala	Leu	Gln	Asp	Phe	Gly	Ala	Ala	Gly	Ile	Ser
	50					55					60				
Cys	Ala	Thr	Ser	Glu	Leu	Ala	Ser	Ala	Gly	Asp	Gly	Gly	Met	His	Val
65					70					75				80	
Glu	Leu	Asp	Arg	Val	Pro	Leu	Arg	Asp	Pro	Asn	Leu	Ala	Pro	Glu	Glu
			85					90						95	
Ile	Leu	Met	Ser	Glu	Ser	Gln	Glu	Arg	Met	Ala	Ala	Val	Val	Arg	Pro
			100					105					110		
Asp	Gln	Leu	Asp	Arg	Phe	Met	Glu	Ile	Cys	Ala	His	Trp	Gly	Val	Ala
	115						120					125			
Ala	Thr	Val	Ile	Gly	Glu	Val	Thr	Asp	Thr	Gly	Arg	Leu	His	Ile	Asp
	130					135					140				
Trp	Gln	Gly	Glu	Arg	Ile	Val	Asp	Val	Asp	Pro	Arg	Thr	Val	Ala	His
145					150					155				160	
Asp	Gly	Pro	Val	Leu	Asp	Met	Pro	Ala	Ala	Arg	Pro	Trp	Trp	Ile	Asp
			165						170					175	
Glu	Leu	Asn	Glu	Asn	Asp	Ala	Asn	Ala							
			180					185							

<210> 1561
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 1561
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 ccaagatgaa gacagcattc agaattgatg tgatttcctt gaatgtggct taggaaatgt
 120
 ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg
 180
 tgcggaatgg agaccattt tgtcattgat tcatctgacc gataaggcca tagtgcagtt
 240
 aggtgatatt cgaaagcttc tttgatgctc tttatgtata tgttgaagg aactaccagg
 300
 cgttgcttta aattcccaat gtgttgtttc gttactacta atttaatacc gtaagctcta
 360
 ggtaaagttc catgttgttg aactctgact gttctctttg gaattgaacg ttttgcattc
 420
 tcctcctgtg gctttagggtc tgacattgta tttgacctt actagt
 466

<210> 1562
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1562
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 Lys Arg Thr Val Arg Val Gln Gln His Gly Thr Leu Pro Arg Ala Tyr
 20 25 30
 Gly Ile Lys Leu Val Val Thr Lys Gln His Ile Gly Asn Leu Lys Gln
 35 40 45
 Arg Leu Val Val Pro Ser Asn Ile Tyr Ile Lys Ser Ile Lys Glu Ala
 50 55 60
 Phe Glu Tyr His Leu Thr Ala Leu Trp Pro Tyr Arg Ser Asp Glu Ser
 65 70 75 80
 Met Thr Lys Trp Val Ser Ile Pro His Pro Val Leu Ile Ser Thr Ser
 85 90 95
 Asn Leu Cys Pro Ile Ser Ser Glu Ser Phe Lys Cys Pro His Phe Leu
 100 105 110
 Ser His Ile Gln Gly Asn His Ile Asn Ser Glu Cys Cys Leu His Leu
 115 120 125
 Gly Met
 130

<210> 1563
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1563

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 atcttcgctg agatgcagca gcgcaaaacc ctggctgccg agttgccatt gcgcgcggta
 120
 ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtgggt gctgtcggcg
 180
 ggtgtgggtt tgggtcatcct gatgaccccg accgtgctgc aaaccgtcta ccacttcagc
 240
 ccgacgggtt cgctgcaagc caacagcctg gcgatcgta cgctgagcct gggctgcatt
 300
 gcgtccggcg cgctggctga ccgttttggg gccggtcgcg ttttggtcac cggttggcgt
 360
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 420
 ataagtgtac gcgt
 434

<210> 1564
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1564
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 20 25 30
 Ala Glu Leu Pro Leu Arg Ala Val Leu Arg Asp His Arg Gly Ala Ile
 35 40 45
 Val Leu Ser Met Leu Leu Thr Trp Leu Leu Ser Ala Gly Val Val Val
 50 55 60
 Val Ile Leu Met Thr Pro Thr Val Leu Gln Thr Val Tyr His Phe Ser
 65 70 75 80
 Pro Thr Val Ala Leu Gln Ala Asn Ser Leu Ala Ile Val Thr Leu Ser
 85 90 95
 Leu Gly Cys Ile Ala Ser Gly Ala Leu Ala Asp Arg Phe Gly Ala Gly
 100 105 110
 Arg Val Leu Val Thr Gly Trp Arg Cys Cys Trp Pro Leu Pro Gly Arg
 115 120 125
 Cys Ile Thr Ala
 130

<210> 1565
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1565
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 agagggtgag cggttctggc acctactgga ccatgaaagc aataaagagg acaagggagc
 120
 ctgcattcgg ccatttcttc ccaagaatca ccataaagg tgtcaaaatc aaggaccctg
 180

atccggtgat tctcgaagtc atcgatgagc agaacaagtt taccctccgag ggagaaaagc
 240
 ggggtggtgct cttgatgctc gacaacctct accgtcccag taccacccgt gcattggcga
 300
 acgggggctg cccttatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg
 360
 acaacacggg tac
 373

<210> 1566
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1566
 Met Ser Gln Arg Val Ser Gly Ser Gly Thr Tyr Trp Thr Met Lys Ala
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 Ile Lys Arg Thr Arg Glu Pro Ala Phe Gly His Phe Phe Pro Arg Ile
 20 25 30
 Thr Ile Lys Val Val Lys Ile Lys Asp Pro Asp Pro Val Ile Leu Glu
 35 40 45
 Val Ile Asp Glu Gln Asn Lys Phe Thr Pro Glu Gly Glu Lys Arg Val
 50 55 60
 Val Leu Leu Met Leu Asp Asn Leu Tyr Arg Pro Ser Thr His Arg Ala
 65 70 75 80
 Leu Ala Asn Gly Gly Val Pro Tyr Leu Arg Ser Lys Ser Val Thr Val
 85 90 95
 Asp Leu Val Asp Ser Arg Asp Asn Thr Gly
 100 105

<210> 1567
 <211> 917
 <212> DNA
 <213> Homo sapiens

<400> 1567
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 aagccgctgc actcctgggg gaccagttt gatgcctcca ggaggataag tctgaagccg
 120
 ggttggaag ggagcggaga ggcccaaaca gagcagcagg cagcgccctc tgctggcacc
 180
 ctggagacag cttcggctgc ggggcccctg cttctagtc ctcccagct ttcaggacac
 240
 cttgacaacc tggggtcct gcagaagtgg cccggctgtc cccaagtct cctgaagcta
 300
 tctgggtagg gtgggaggca gtgctgtgag ccacaaatgc aaagcagagg ggacagatgt
 360
 tgggactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca
 420
 tgaggcttcg tgttctagaa ggtggtgggt tagtgccgca ctgagggcgt gtccgggagg
 480
 gagcatgtgt caccagggt caggaaacag catgagtcac gacgcggggg tgtttaaggc
 540

attcgtgcc a cagcggggac ctcggagcta tgccttgata aggcaagtga gggtacatgt
 600
 acgatgatgc ggtttgtgct gcagactgga aaaaagcagg ggctttgtcc tctcctgacc
 660
 ccctcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag
 720
 tactgcagct tcagctggcg tggatgggggt gcttacagga gcagcagggc tgaggagat
 780
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 840
 ttgcattaga ccataccctt ggctgtgtt taggcaaata gggatgaaag tggggccaag
 900
 ggctgaagag ctgggtc
 917

<210> 1568

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1568

Met	Gly	Pro	Ala	Leu	Pro	His	Val	Phe	Glu	Ser	Gln	His	Leu	Ser	Pro
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Leu	Leu	Cys	Ile	Cys	Gly	Ser	Gln	His	Cys	Leu	Pro	Pro	Tyr	Pro	Asp
			20					25					30		
Ser	Phe	Arg	Arg	Leu	Gly	Gly	Gln	Pro	Gly	His	Phe	Cys	Arg	Asp	Pro
		35					40					45			
Arg	Leu	Ser	Arg	Cys	Pro	Glu	Ser	Trp	Gly	Gly	Leu	Glu	Gly	Arg	Gly
	50					55					60				
Pro	Ala	Ala	Glu	Ala	Val	Ser	Arg	Val	Pro	Ala	Glu	Gly	Ala	Ala	Cys
65					70				75					80	
Cys	Ser	Val	Trp	Ala	Ser	Pro	Leu	Pro	Ser	Gln	Pro	Gly	Phe	Arg	Leu
			85				90					95			
Ile	Leu	Leu	Glu	Ala	Ser	Asn	Trp	Val	Pro	Gln	Glu	Cys	Ser	Gly	Phe
			100				105					110			

Pro

<210> 1569

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1569

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 120
 gtggccagca cggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt
 180
 attaacccca cggacctgga catagggcgt gtcttcactt gccgaagcat gaacgaagcc
 240
 atccctagtg gcaaggagac ttccatcgag ctggatgtgc accaccctcc tacagtgacc
 300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc
360

acagccaacc cggagatct
379

<210> 1570

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1570

Gly	Gly	Pro	Val	Ile	Leu	Leu	Gln	Ala	Gly	Thr	Pro	His	Asn	Leu	Thr
1				5					10					15	
Cys	Arg	Ala	Phe	Asn	Ala	Lys	Pro	Ala	Ala	Thr	Ile	Ile	Trp	Phe	Arg
		20						25					30		
Asp	Gly	Thr	Gln	Gln	Glu	Gly	Ala	Val	Ala	Ser	Thr	Glu	Leu	Leu	Lys
		35					40					45			
Asp	Gly	Lys	Arg	Glu	Thr	Thr	Val	Ser	Gln	Leu	Leu	Ile	Asn	Pro	Thr
	50					55				60					
Asp	Leu	Asp	Ile	Gly	Arg	Val	Phe	Thr	Cys	Arg	Ser	Met	Asn	Glu	Ala
65					70				75					80	
Ile	Pro	Ser	Gly	Lys	Glu	Thr	Ser	Ile	Glu	Leu	Asp	Val	His	His	Pro
			85					90					95		
Pro	Thr	Val	Thr	Leu	Ser	Ile	Glu	Pro	Gln	Thr	Val	Gln	Glu	Gly	Glu
		100					105					110			
Arg	Val	Val	Phe	Thr	Cys	Gln	Ala	Thr	Ala	Asn	Pro	Glu	Ile		
		115				120					125				

<210> 1571

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1571

tgcgcacttt tccgctcccc atgggtcccc tggncgttga tcatgcccc gatgttcac
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atcggcatct tcttcttcct gccaaagcggc caagccgtgc tccagtcttt ccagatggaa
120
gatgcgttcg gcattgtcgac cgaatgggtc ggattggaca acttccgcaa cctgctggat
180
gacccacct acctgaattc cttccagcgc accgccgtgt tctcggtgct ggtggcaggg
240
gtcgggatcg ccgtgtcact ggggtctggcg atctttgccg accccatcac tccgtcgcca
300
tgtgtacaag acacactgct gatcgtgccc tacgccgtgg cacccatgat cgccggc
357

<210> 1572

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1572

Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro


```

      1           5           10           15
Gln Met Phe Ile Ile Gly Ile Phe Phe Phe Leu Pro Ser Gly Gln Ala
      20           25           30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35           40           45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50           55           60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
65           70           75           80
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85           90           95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Leu Ile Val Pro Tyr Ala
      100          105          110
Val Ala Pro Met Ile Ala Gly
      115

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<210> 1573

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1573

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tattgtacag attttggaaat cggtacagtt gaaatgggaa ctttttcaga gctggacaga
120
cttttcaagg ctccatcttt ctaataaaact ggccattttt ggaattgggtt ataacacccg
180
ttggaaagag gatatccgtt accattatgc tgagatcagc tcccaggtgc cccttgga
240
gcgacttcgg gactacttca actctgagaa gcctgaagga cggatcatta tgacccgagt
300
gcagaaaatg aactggaaaa atgtttacta caaat
337

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<210> 1574

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1574

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Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
      1           5           10           15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
      20           25           30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
      35           40           45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
      50           55           60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
65           70           75           80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
      85           90           95

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<210> 1575
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 1575
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 catctcgttg ccgaaattgg ggccgatggt gtccatgttg ggcagtctga catgccggtc
 120
 gaccaggccc gtgcgattct gggcgacgat ctactcatcg gcttgtccgc tcagactccc
 180
 gcccatgtgg aggccgcctt gtcccagggg cgtgacatcg tcgactatct gggagttggg
 240
 gccctgcatg gtactggaac caaacctgag gctggggagc tcggcctggc tgagattcgt
 300
 gatgtcgtca acgccagccc gtggccgggtg tgcgtcatcg gtggggtgag cgcacccgat
 360
 gctcaagacg tagcccggtt gggatgtgac ggcctgagcg tcgtctcggc gatttgccgg
 420
 agtaccgacc ccaagtccag tgcacgggaa cttgcggagg cgtggcgta g
 471

<210> 1576
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 1576
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 Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His
 20 25 30
 Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly
 35 40 45
 Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu
 50 55 60
 Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly
 65 70 75 80
 Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu
 85 90 95
 Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val
 100 105 110
 Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly
 115 120 125
 Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro
 130 135 140
 Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr
 145 150 155

<210> 1577
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 1577

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 atcgagctgg agccgatgct gccgcaggcg cccgacaagc aactgcacgc gctgatcgag
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 287

<210> 1578

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1578

Leu	Val	Leu	Gln	Arg	Pro	Ile	Ser	Ala	Leu	Arg	Met	Leu	Ile	Gly	Gly
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Pro	Leu	Arg	Ile	Pro	His	Pro	Ala	Gly	Leu	Arg	Thr	Val	Ala	Leu	Glu
		20						25				30			
Pro	Gly	Val	Ala	His	Ala	Arg	Thr	Leu	Arg	Val	Ala	Gly	Ala	Gly	Phe
		35					40				45				
Pro	Ala	Arg	Gly	Gln	Arg	Ala	Ala	Gly	Asp	Leu	Val	Ile	Glu	Leu	Glu
	50					55				60					
Pro	Met	Leu	Pro	Gln	Ala	Pro	Asp	Lys	Gln	Leu	His	Ala	Leu	Ile	Glu
65				70					75					80	
Gln	Leu	Asp	Val	Ala	Leu	Gly	Lys	Ser	Ala	Thr	Arg	His	Phe	Pro	
			85						90					95	

<210> 1579

<211> 2829

<212> DNA

<213> Homo sapiens

<400> 1579

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 120
 ggggcggggc ggagcccccg cagtccgggg tcgccggcga gggccatgtc gctgttgggg
 180
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 420
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 480

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1980
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2100

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 2220
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 2280
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 2340
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 2400
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<210> 1580

<211> 824

<212> PRT

<213> Homo sapiens

<400> 1580

Met	Ser	Leu	Leu	Gly	Asp	Pro	Leu	Gln	Ala	Leu	Pro	Pro	Ser	Ala	Ala
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Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
			20					25					30		
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
		35					40					45			
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
	50					55					60				
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65					70					75				80	
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
				85					90					95	
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
			100					105					110		
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
			115				120					125			
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
	130					135					140				
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145					150					155				160	
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile

165																170																175															
Phe	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
180																185																190															
Asn	Asn	Asn	Phe	Thr	Phe	Glu	Phe	Ser	Gln	Trp	Ser	Gln	Leu	Asp	Val	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
195																200																205															
Cys	Asp	Ile	Pro	Glu	Ser	Phe	Gln	Arg	Ser	Val	Asp	Gly	Val	Ser	Glu	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
210																215																220															
Ser	Lys	Leu	Gln	Ile	Cys	Val	Glu	Pro	Thr	Ser	Gln	Lys	Leu	Met	Pro	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
225																230																235															
Gly	Ser	Thr	Leu	Val	Leu	Gln	Cys	Val	Ala	Val	Gly	Ser	Pro	Ile	Pro	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
245																250																255															
His	Tyr	Gln	Trp	Phe	Lys	Asn	Glu	Leu	Pro	Leu	Thr	His	Glu	Thr	Lys	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
260																265																270															
Lys	Leu	Tyr	Met	Val	Pro	Tyr	Ala	Asp	Leu	Glu	His	Gln	Gly	Thr	Tyr	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
275																280																285															
Trp	Cys	His	Val	Tyr	Asn	Asp	Arg	Asp	Ser	Gln	Asp	Ser	Lys	Lys	Val	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
290																295																300															
Glu	Ile	Ile	Ile	Gly	Arg	Thr	Asp	Glu	Ala	Val	Glu	Cys	Thr	Glu	Asp	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
305																310																315															
Glu	Leu	Asn	Asn	Leu	Gly	His	Pro	Asp	Asn	Lys	Glu	Gln	Thr	Thr	Asp	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
325																330																335															
Gln	Pro	Leu	Ala	Lys	Asp	Lys	Val	Ala	Leu	Leu	Ile	Gly	Asn	Met	Asn	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
340																345																350															
Tyr	Arg	Glu	His	Pro	Lys	Leu	Lys	Ala	Pro	Leu	Val	Asp	Val	Tyr	Glu	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
355																360																365															
Leu	Thr	Asn	Leu	Leu	Arg	Gln	Leu	Asp	Phe	Lys	Val	Val	Ser	Leu	Leu	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
370																375																380															
Asp	Leu	Thr	Glu	Tyr	Glu	Met	Arg	Asn	Ala	Val	Asp	Glu	Phe	Leu	Leu	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
385																390																395															
Leu	Leu	Asp	Lys	Gly	Val	Tyr	Gly	Leu	Leu	Tyr	Tyr	Ala	Gly	His	Gly	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
405																410																415															
Tyr	Glu	Asn	Phe	Gly	Asn	Ser	Phe	Met	Val	Pro	Val	Asp	Ala	Pro	Asn	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
420																425																430															
Pro	Tyr	Arg	Ser	Glu	Asn	Cys	Leu	Cys	Val	Gln	Asn	Ile	Leu	Lys	Leu	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val																	
435																440																4															

595	600	605
Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu		
610	615	620
Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp		
625	630	635
Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser		
645	650	655
Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu		
660	665	670
Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu		
675	680	685
Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu		
690	695	700
Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly		
705	710	715
Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro		
725	730	735
Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser		
740	745	750
Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro		
755	760	765
Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp		
770	775	780
Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg		
785	790	795
Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser		
805	810	815
Asp Arg Leu Arg Ile Ser Glu Lys		
820		

<210> 1581
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1581
 gatccgcacg gcccgtttat tgacgaggtg accttcaccc gagagggcca tacctatcac
 60
 cgggtgcccc aggtggctga cgcctggctc gattcgggct cgatgccctt cgcccagtgg
 120
 ggataccgcg atgtgcccgg ttcgaaggag aagttcgagt cccactaccc ggggtgacttc
 180
 atctgtgagg ccatcgacca gacccgcggg tggttttaca ccatgatggc cgtcggaacc
 240
 ctggtgtttg acgagtcctc gtaccgcaat gtgctgtgtc tgggccacat cttggccgag
 300
 gacggtcgca agatgagcaa gcaccttggc aacatcctgt tgcctatccc gctcatggat
 360
 tcccacggtg ccgacgcgct gcgttggttc atggcgggccg acggctcccc atggagtgca
 420
 cgacgc
 426

<210> 1582

<211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1582
 Asp Pro His Arg Pro Phe Ile Asp Glu Val Thr Phe Thr Arg Glu Gly
 1 5 10 15
 His Thr Tyr His Arg Val Pro Glu Val Ala Asp Ala Trp Leu Asp Ser
 20 25 30
 Gly Ser Met Pro Phe Ala Gln Trp Gly Tyr Pro His Val Pro Gly Ser
 35 40 45
 Lys Glu Lys Phe Glu Ser His Tyr Pro Gly Asp Phe Ile Cys Glu Ala
 50 55 60
 Ile Asp Gln Thr Arg Gly Trp Phe Tyr Thr Met Met Ala Val Gly Thr
 65 70 75 80
 Leu Val Phe Asp Glu Ser Ser Tyr Arg Asn Val Leu Cys Leu Gly His
 85 90 95
 Ile Leu Ala Glu Asp Gly Arg Lys Met Ser Lys His Leu Gly Asn Ile
 100 105 110
 Leu Leu Pro Ile Pro Leu Met Asp Ser His Gly Ala Asp Ala Leu Arg
 115 120 125
 Trp Phe Met Ala Ala Asp Gly Ser Pro Trp Ser Ala Arg Arg
 130 135 140

<210> 1583
 <211> 450
 <212> DNA
 <213> Homo sapiens

<400> 1583
 nnacgcgtga agggttatgg agatggttca gggagtaagg aaggtttcag ggatgggttta
 60
 ggggggttctg aggaaatggg gtcaatggat gaggcaggtt ataggaagga tttgggggct
 120
 cctaaggga taggttcagg gagtaaggca ggtttcaggg atggtttagg gagttctggg
 180
 gaaatgggg caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg
 240
 gggtcaggca gttacacaga ttacaggaat ggtttaggca gttctggaaa aatcagttca
 300
 ggggatgagg cagggtataa gaatgtttta ggggggttctg ggaggaatcc attagggagc
 360
 gaggcaggtt ctaggggtag tttggaggat tctgggtaca tcttgtcatg gaatgaggca
 420
 gggttctaggc aaggctttgg gggaactagt
 450

<210> 1584
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 1584
 Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe


```

      1             5             10             15
Arg Asp Gly Leu Gly Gly Ser Glu Glu Met Gly Ser Met Asp Glu Ala
      20             25             30
Gly Tyr Arg Lys Asp Leu Gly Ala Pro Lys Gly Ile Gly Ser Gly Ser
      35             40             45
Lys Ala Gly Phe Arg Asp Gly Leu Gly Ser Ser Gly Glu Met Gly Ser
      50             55             60
Met Asp Glu Ala Asp Tyr Arg Lys Asp Leu Gly Ala Pro Glu Glu Met
      65             70             75             80
Gly Ser Gly Ser Tyr Thr Asp Tyr Arg Asn Gly Leu Gly Ser Ser Gly
      85             90             95
Lys Ile Ser Ser Gly Asp Glu Ala Gly Tyr Lys Asn Val Leu Gly Gly
      100            105            110
Ser Gly Arg Asn Pro Leu Gly Ser Glu Ala Gly Ser Arg Gly Ser Leu
      115            120            125
Glu Asp Ser Gly Tyr Ile Leu Ser Trp Asn Glu Ala Gly Ser Arg Gln
      130            135            140
Gly Phe Gly Gly Thr Ser
      145            150

```

<210> 1585
 <211> 596
 <212> DNA
 <213> Homo sapiens

```

<400> 1585
tgatcatctg taattcttgt ccgtgggcgt ttgaactgag aatgtcttaa gaagttggga
60
tctaataccga gctgctgctg gcaaagttgg gtgaggtctg cagagagtgc gtccatctgt
120
ggcagctgca gggcaagctg gggaggaagc gcagggtggt gcacaggttg catcataatg
180
gaaggaaaga gcggcaggtc cagagaaacc ggcctctccc aaaaagttat caaacactgg
240
tttagaaata cgcttttttaa ggaacgacag agaaataaag attcaccata caacttcagt
300
aaccctccta taacggttttt agaagatatc agaattgatc cacagcccac ctctttagaa
360
cattacaaat ctgatgcac attcagtaaa aggtcttcta gaacgagatt tactgactac
420
cagcttaggg ttctgcaaga cttttttgac acaaacgctt acccaaaaga tgatgaaata
480
gaacaactct ccactgttct caatctgcct acccggtta ttgttgatg gttccagaat
540
gtcgtcaga aagcacgaaa gagttatgag aatcaagcag aaacccttc acgcgt
596

```

<210> 1586
 <211> 139
 <212> PRT
 <213> Homo sapiens

```

<400> 1586
Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

```



```

      1             5             10             15
Val Ile Lys His Trp Phe Arg Asn Thr Leu Phe Lys Glu Arg Gln Arg
      20             25             30
Asn Lys Asp Ser Pro Tyr Asn Phe Ser Asn Pro Pro Ile Thr Val Leu
      35             40             45
Glu Asp Ile Arg Ile Asp Pro Gln Pro Thr Ser Leu Glu His Tyr Lys
      50             55             60
Ser Asp Ala Ser Phe Ser Lys Arg Ser Ser Arg Thr Arg Phe Thr Asp
      65             70             75             80
Tyr Gln Leu Arg Val Leu Gln Asp Phe Phe Asp Thr Asn Ala Tyr Pro
      85             90             95
Lys Asp Asp Glu Ile Glu Gln Leu Ser Thr Val Leu Asn Leu Pro Thr
      100            105            110
Arg Val Ile Val Val Trp Phe Gln Asn Ala Arg Gln Lys Ala Arg Lys
      115            120            125
Ser Tyr Glu Asn Gln Ala Glu Thr Pro Ser Arg
      130            135

```

<210> 1587

<211> 501

<212> DNA

<213> Homo sapiens

<400> 1587

```

tgtacacaca gtgatttggg gtcctttttc ctaaaacagc ttctttatca ggactttgga
60
attctgggtg agatagaaac actgaaaaca gggcggaagt tttttcttct ggctttcttag
120
tccacggagg gctcagcgtg gagaggatat gccgtggcat tctccctggg agaccacaca
180
tgttcccgac agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg
240
cgcgtgctcc tgacagctca gacccagac cgcaggtgct cccgacagct cagaccccag
300
accgcgggtg ctctgacag ctacagacccc agaccgcgcg tgctcccgac agctcagacc
360
ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcgtgctcc cgacagctca
420
gacccagac cgcgggtgct cctgacagct cagaccccag accgcgggtg ctctgacag
480
ctcagacccc agaccacgcg t
501

```

<210> 1588

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1588

```

Ser Thr Glu Gly Ser Ala Trp Arg Gly Tyr Ala Val Ala Phe Ser Leu
1             5             10             15
Gly Asp His Thr Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Cys Ala
      20             25             30
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Leu Thr Ala Gln Thr

```



```

          35          40          45
Pro Asp Arg Arg Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Gly Ala
   50          55          60
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Pro Thr Ala Gln Thr
65          70          75          80
Pro Asp Arg Gly Cys Ser
          85

```

<210> 1589

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1589

```

aagcttgctg gggacaccct ttttacgggg cctcgtgggg gaggagttac ctgcattgac
60
tccaccgggt ccactaacgc cgacatggct gctttcgtgc gagcaggggg aacgtctttc
120
tgcctactcg ttgctgacca ccaagagggc gggcgtggac gggtcacgcg cagttggcag
180
gatgtccccg gtacgagttt ggcgatctca gcgttggtgc ccaatgatcg tccgtcgcag
240
gactggggct ggctgtcgat ggttgcgggg ctcgctggtg tcaagggtcat caaggaggtc
300
ggtggggctg accgttcccc agtgacgctg aagtggccca atgatgtgct cgtggatctg
360
gacactgacc agggcgggcaa agtggtgcgga attctctcag aacgcgt
407

```

<210> 1590

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1590

```

Lys Leu Ala Gly Asp Thr Leu Phe Thr Gly Pro Arg Gly Gly Gly Val
 1          5          10          15
Thr Cys Ile Asp Ser Thr Gly Ser Thr Asn Ala Asp Met Ala Ala Phe
          20          25          30
Val Arg Ala Gly Gly Thr Ser Phe Cys Leu Leu Val Ala Asp His Gln
          35          40          45
Glu Gly Gly Arg Gly Arg Phe Thr Arg Ser Trp Gln Asp Val Pro Gly
          50          55          60
Thr Ser Leu Ala Ile Ser Ala Leu Val Pro Asn Asp Arg Pro Ser Gln
65          70          75          80
Asp Trp Gly Trp Leu Ser Met Val Ala Gly Leu Ala Val Val Lys Val
          85          90          95
Ile Lys Glu Val Gly Gly Ala Asp Arg Ser Arg Val Thr Leu Lys Trp
          100          105          110
Pro Asn Asp Val Leu Val Asp Leu Asp Thr Asp Gln Gly Gly Lys Val
          115          120          125
Cys Gly Ile Leu Ser Glu Arg
          130          135

```


<210> 1591
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 1591
 agatctctct ccctgagata acccaggctt tagaaccaaa gagctgagag accctgtccc
 60
 ttcagagagg cacttgccacc tagaggagtc tctgggaagc agatggggat atgggacaga
 120
 cgcattcttga aaaagccccc agatgcctcc ctatggagga cctcaccac ccacatcacc
 180
 agtagggagc ttgggactta ccctaaccac aggggggtga ctgttgctgt ccctgcacag
 240
 aacgtccagc gagtcctgac tttccagccg ctgcgcttca tccaggagca cgtcctgac
 300
 cctgtctttg acctcagcgg ccccagcagt ctggcccagc ctgtccagta ctccttgac
 360
 tgtgggatcc ctggctgctc acgcccctga ggacccctcg gatctgctcc agcacgtgaa
 420
 attt
 424

<210> 1592
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1592
 Met Gly Ile Trp Asp Arg Arg Ile Leu Lys Lys Pro Pro Asp Ala Ser
 1 5 10 15
 Leu Trp Arg Thr Ser Pro Thr His Ile Thr Ser Arg Glu Leu Gly Thr
 20 25 30
 Tyr Pro Asn His Arg Gly Val Thr Val Val Val Pro Ala Gln Asn Val
 35 40 45
 Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val
 50 55 60
 Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro
 65 70 75 80
 Val Gln Tyr Ser Leu Asp Cys Gly Ile Pro Gly Cys Ser Arg Pro
 85 90 95

<210> 1593
 <211> 1678
 <212> DNA
 <213> Homo sapiens

<400> 1593
 cttgaatcta aaataaatga aataaacaca gaaattaacc agttgattga aaagaaaatg
 60
 atgagaaatg agccattga aggcaaactc tcaactgtata ggcaacaggc atctatcatt
 120
 tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gttagccagc
 180

ctagagagag aagcatcagt aaagagaaat cagacccgtg aatttgatgg tactgaagtt
240
ttaaagggag atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc
300
aaaaagaagc atcacataat agctgaactt aaagctgaat tcggtctttt gcagaggact
360
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag
420
aaaaagggta tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg
480
aagagtgaag ttgatgaaat gaaaggacga acattggatg atatgtctga aatggtgaaa
540
aaactgtatt cattgggtatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta
600
cgacagttgc gtcaaaaaata tcaagaactg acccaggagt gtgatgaaaa gaaatcccag
660
tatgatagct gtgcagcagg cctcgaaagc aatcgggtcca aattagaaca ggaagttaga
720
agactccgtg aagaatgtct tcaagaagaa agtagatacc attatacaaa ttgtatgatt
780
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct
840
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa
900
gaaaaccttg gaaagaaact tcgggaaaaa caaaaagtta tacgagaaaag tcatgggtcca
960
aatatgaaac aagcaaaaaat gtggcgtgat ttggaacaat taatggaatg taagaaacag
1020
tgctttctga aacaacaaaag ccaaacttcc attgggtcagg taattcagga ggggtggggag
1080
gaccggctaa tactgtgaat tcttgtgtca tcgtttgggg ttttacttga taccactagc
1140
tataagccta atctcataat gtattttcttt ttgaaactg atttgtttag cattttgttt
1200
tcagaagagc cattctttat taagttttca tagaaaataa tgtaaggta gatttagttt
1260
gaatgttttt tcatatgaaa aagaggcttt tattcttttc catagtttag acatcactgg
1320
cgtcttctga gttttatgag acaggaaaact aagtttacta tctgtaaatg taaacatatg
1380
tccattaaga aacatgtagt ttttttttag aatgtaataa cccagtggct tactgttttt
1440
cttaatctct tttaaaaaaa ctttagaaga atcttttagg aactaatatc tcttgttctg
1500
aagaaacatt tatctgacgt tcagcagttc ctacagtttt acttcagttt atttttcttc
1560
tgtaaaatgc aagaaaattt aatattttga ctaacatgtc ttttctgttt gtatcattta
1620
aaggcaaata aacttggtac gtatttcata tctatttaaa aaatgaaaaa aaaaaaaa
1678

<210> 1594

<211> 365

<212> PRT

<213> Homo sapiens

<400> 1594

```

Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
 1           5           10           15
Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
          20           25           30
Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
          35           40           45
Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
          50           55           60
Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
65           70           75           80
Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
          85           90           95
Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
          100          105          110
Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Leu Lys Gln Arg His
          115          120          125
Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
          130          135          140
Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
145          150          155          160
Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
          165          170          175
Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
          180          185          190
Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
          195          200          205
Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
          210          215          220
Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
225          230          235          240
Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
          245          250          255
Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
          260          265          270
Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
          275          280          285
Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
          290          295          300
Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
305          310          315          320
Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
          325          330          335
Cys Lys Lys Gln Cys Phe Leu Lys Gln Gln Ser Gln Thr Ser Ile Gly
          340          345          350
Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
          355          360          365

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<210> 1595

<211> 559

<212> DNA

<213> Homo sapiens

<400> 1595

accggtcccc ctcacaggcc cacacctgct tctcctcctg gggcagggca gcctgggtggg
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 gcatggccgg ggagccgccc acttggcgag gaacaggctc catagcgacc tcagaacact
 120
 ggtgctgggg ccagccagg gagagcatct tcccgtggg accttccccg gggcgggtca
 180
 tcccttgagg atgtaggggtg cagctgagat ggtggcgggc ccattcctgc tgttcgccag
 240
 cctgggctgg ggggtactagg atcacccttg ggctgatgag gagccccgggt cttgggcagt
 300
 taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctgccccagg
 360
 ccacactctc aaatactggc cctcgacaaa aggagctgg gctctcaaga cagggccacc
 420
 tctctctgc tgggcccgcg cccgtggaga gcaagtggga actgacccta tcttctgtcc
 480
 cagcttgagg agccagcatc aaggtcaggc ctacttgcc caagaaagag gagtgaggag
 540
 gccactgga ggaacgcgt
 559

<210> 1596

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1596

Met	Leu	Ala	Leu	Gln	Ala	Gly	Thr	Glu	Asp	Arg	Val	Ser	Ser	His	Leu
1				5					10					15	
Leu	Ser	Thr	Gly	Ala	Gly	Pro	Ala	Glu	Arg	Arg	Trp	Pro	Cys	Leu	Glu
			20					25					30		
Ser	Pro	Ala	Ala	Phe	Cys	Arg	Gly	Pro	Val	Phe	Glu	Ser	Val	Ala	Trp
		35				40					45				
Ala	Arg	Pro	Leu	Pro	Trp	Phe	His	His	Phe	Pro	Asp	Cys	Asp	Pro	Pro
	50				55					60					
Leu	Gly	Asn	Cys	Pro	Arg	Pro	Gly	Leu	Leu	Ile	Ser	Pro	Arg	Val	Ile
65				70					75					80	
Leu	Val	Pro	Pro	Ala	Gln	Ala	Gly	Glu	Gln	Gln	Glu	Trp	Gly	Arg	His
			85					90					95		
His	Leu	Ser	Cys	Thr	Leu	His	Leu	Gln	Gly	Met	Ser	Arg	Pro	Gly	Glu
		100					105					110			
Gly	Pro	Ser	Gly	Lys	Met	Leu	Ser	Leu	Ala	Gly	Pro	Gln	His	Gln	Cys
	115				120					125					
Ser	Glu	Val	Ala	Met	Glu	Pro	Val	Pro	Arg	Gln	Val	Gly	Gly	Ser	Pro
	130				135					140					
Ala	Met	Pro	His	Gln	Ala	Ala	Leu	Pro	Gln	Glu	Glu	Lys	Gln	Val	Trp
145				150					155					160	
Ala	Cys	Glu	Arg	Asp	Arg										
				165											

<210> 1597

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1597

tcgtcaacgg aaacttcggc cttcgggcct acccataatc cttgggacct tgaacgggta
60
ccgggtgggtt ccgggtgggtg ttcagcagct agcttggtt cctttcaggc cccgttggtt
120
ttgggcactg ataccggggg ctcgatccgc caacctggag cggtgaccgg caccgtcggg
180
atcaagccga cctacgggtc gacctccga tacggcggtta tcgctatggc ttcattcttg
240
gataactctg ggccctgcgc ccgtaccgtc cttgacgccg cgttgctcca tcaggccatt
300
gccggtcacg acgctatgga ccagaccacg attaatacagc ccaccccggc ggtcgttgag
360
gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg
420
cagggttacg accctcaggt cgaggcccg ttccacgagg ctgtcgagat gctaatagag
480
gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctgcctt acctgcttat
540
taccttattc agcctgccga ggtgtctagc aacctggctc gttacgacgc catgcgttac
600
ggcttacgc
609

<210> 1598

<211> 203

<212> PRT

<213> Homo sapiens

<400> 1598

Ser	Ser	Thr	Glu	Thr	Ser	Ala	Phe	Gly	Pro	Thr	His	Asn	Pro	Trp	Asp
1				5					10					15	
Leu	Glu	Arg	Val	Pro	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Ala	Ser	Leu
			20						25					30	
Ala	Ser	Phe	Gln	Ala	Pro	Leu	Ala	Leu	Gly	Thr	Asp	Thr	Gly	Gly	Ser
			35						40					45	
Ile	Arg	Gln	Pro	Gly	Ala	Val	Thr	Gly	Thr	Val	Gly	Ile	Lys	Pro	Thr
			50						55					60	
Tyr	Gly	Ser	Thr	Ser	Arg	Tyr	Gly	Val	Ile	Ala	Met	Ala	Ser	Ser	Leu
						70					75				80
Asp	Thr	Pro	Gly	Pro	Cys	Ala	Arg	Thr	Val	Leu	Asp	Ala	Ala	Leu	Leu
						85					90				95
His	Gln	Ala	Ile	Ala	Gly	His	Asp	Ala	Met	Asp	Gln	Thr	Thr	Ile	Asn
						100								110	
Gln	Pro	Thr	Pro	Ala	Val	Val	Glu	Ala	Ala	Arg	Gln	Ala	Asp	Val	Ser
														115	
Gly	Val	Arg	Ile	Gly	Val	Val	Thr	Glu	Leu	Ser	Gly	Gln	Gly	Tyr	Asp
														130	
Pro	Gln	Val	Glu	Ala	Arg	Phe	His	Glu	Ala	Val	Glu	Met	Leu	Ile	Glu
														140	
Ala	Gly	Ala	Glu	Val	Val	Glu	Val	Ser	Cys	Pro	Asn	Phe	Asp	Leu	Ala
														150	
														155	
														160	

				165					170					175					
Leu	Pro	Ala	Tyr	Tyr	Leu	Ile	Gln	Pro	Ala	Glu	Val	Ser	Ser	Asn	Leu				
			180					185					190						
Ala	Arg	Tyr	Asp	Ala	Met	Arg	Tyr	Gly	Leu	Arg									
		195					200												

<210> 1599

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1599

```

gcgtggccga cggctgctgt gtggtcagcg atctttatctt ttcttgatcg attcagaacc
60
cggcacctgc acgtgtggtt tctctgcttt tgttggggag cgtgcgtcgc gacctggatt
120
agcatgcacg tgaacacgtg gatggccggg atgctctcgg tgacaggtgg ggttgatcca
180
gcatcggggc cgggtccggc agtgatttcg gctccctttg ttgaggaatc atgcaaggcg
240
cttgtgcttt tcgcgctggc catcggcatg gggcgacgga tgacctcggg agttcagacg
300
gtgagcatgg ccgggctctc ggcaattggt ttgcctcttg ttgagaacat tatgtactac
360
gcccgtcag ataactacgc ccgtgtgacg gcttcgggtg gggaccccaa acaaggcggt
420
gatgaagttg gtgctgttgc ggggagtgta tgccctcttg gggcatccgc tgttcaccag
480
catgacgggt atcggctctg cccttgggct gaggtcacga agttga
526

```

<210> 1600

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1600

Met	His	Val	Asn	Thr	Trp	Met	Ala	Gly	Met	Leu	Ser	Val	Thr	Gly	Gly				
1				5				10					15						
Val	Asp	Pro	Ala	Ser	Gly	Ala	Gly	Pro	Ala	Val	Tyr	Ser	Ala	Pro	Phe				
		20					25					30							
Val	Glu	Glu	Ser	Cys	Lys	Ala	Leu	Val	Leu	Phe	Ala	Leu	Ala	Ile	Gly				
	35					40				45									
Met	Gly	Arg	Arg	Met	Thr	Ser	Val	Val	Gln	Thr	Val	Ser	Met	Ala	Gly				
	50			55				60											
Leu	Ser	Ala	Ile	Gly	Phe	Ala	Phe	Val	Glu	Asn	Ile	Met	Tyr	Tyr	Ala				
65			70					75					80						
Arg	Ala	Asp	Asn	Tyr	Ala	Arg	Val	Thr	Ala	Ser	Gly	Gly	Asp	Pro	Lys				
		85					90					95							
Gln	Gly	Val	Asp	Glu	Val	Gly	Ala	Val	Ala	Gly	Ser	Val	Cys	Leu	Val				
	100					105				110									
Trp	Ala	Ser	Ala	Val	His	Gln	His	Asp	Gly	Tyr	Arg	Ser	Gly	Pro	Trp				
	115					120					125								
Ala	Glu	Val	Thr	Lys	Leu														

130

<210> 1601

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1601

gccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc
60

atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg
120

ttcttcccg ggcgaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg
180

ctcaagctca tggctggtct cgataagccc aataacggcg atgccaactt ggctaaaggc
240

gccaccgtcg gaatcttgct tcaggagccc ccgctcaccg aggacaaaac tgttcgcgag
300

aacgtcgaag aggccgtcgg cgacatcaaa gccaaagctgg cacgggtcga ggaagtctcc
360

gccgagatgg ccaaccctga cgccgacttt gacgccctga tggcggagat gggtgagctg
420

cagaccgagc tcgataacgc caacgcg

447

<210> 1602

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1602

Met Ala Glu Phe Ile Tyr Thr Met His Asn Val Arg Lys Ala Val Gly
1 5 10 15

Asp Lys Val Ile Leu Asp Asn Val Thr Leu Ser Phe Phe Pro Gly Ala
20 25 30

Lys Ile Gly Val Val Gly Pro Asn Gly Ala Gly Lys Ser Thr Met Leu
35 40 45

Lys Leu Met Ala Gly Leu Asp Lys Pro Asn Asn Gly Asp Ala Asn Leu
50 55 60

Ala Lys Gly Ala Thr Val Gly Ile Leu Leu Gln Glu Pro Pro Leu Thr
65 70 75 80

Glu Asp Lys Thr Val Arg Glu Asn Val Glu Glu Ala Val Gly Asp Ile
85 90 95

Lys Ala Lys Leu Ala Arg Phe Glu Glu Val Ser Ala Glu Met Ala Asn
100 105 110

Pro Asp Ala Asp Phe Asp Ala Leu Met Ala Glu Met Gly Glu Leu Gln
115 120 125

Thr Glu Leu Asp Asn Ala Asn Ala
130 135

<210> 1603

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1603

acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag
60
gaaatccttg aggcgtaact caacgaggtc ttcgtcggtc aggatggcca gcgcgccgtg
120
cacgggtttg gcttggccag tcagttcttc tttggccagc ctttgtccga gctgaagttg
180
catcaagtcg cgttgttggt cgggatggtc aagggcccgt cctattacaa cccgcggcgc
240
aatccggaac gtgcgctcga gcgtcgtaac ctgggtgctgg atgtgctgga acagcagggg
300
gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc
360
ggcaagctgg cggacagctc cttcccaggc tttatcgacc tggtaaacy ccagttgcgt
420
gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac
480
ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc
540

<210> 1604

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1604

Thr	Arg	Lys	Leu	Thr	Glu	Ala	Met	Met	Ala	Met	Leu	Leu	Glu	Leu	His
1				5					10					15	
Tyr	Ser	Lys	Gln	Glu	Ile	Leu	Glu	Ala	Tyr	Leu	Asn	Glu	Val	Phe	Val
			20					25					30		
Gly	Gln	Asp	Gly	Gln	Arg	Ala	Val	His	Gly	Phe	Gly	Leu	Ala	Ser	Gln
		35					40					45			
Phe	Phe	Phe	Gly	Gln	Pro	Leu	Ser	Glu	Leu	Lys	Leu	His	Gln	Val	Ala
	50					55					60				
Leu	Leu	Val	Gly	Met	Val	Lys	Gly	Pro	Ser	Tyr	Tyr	Asn	Pro	Arg	Arg
65					70					75				80	
Asn	Pro	Glu	Arg	Ala	Leu	Glu	Arg	Arg	Asn	Leu	Val	Leu	Asp	Val	Leu
				85					90					95	
Glu	Gln	Gln	Gly	Val	Ala	Thr	Ala	Glu	Gln	Val	Ala	Ala	Ala	Lys	Lys
			100					105					110		
Met	Pro	Leu	Gly	Val	Thr	Thr	Arg	Gly	Lys	Leu	Ala	Asp	Ser	Ser	Phe
		115					120					125			
Pro	Gly	Phe	Ile	Asp	Leu	Val	Lys	Arg	Gln	Leu	Arg	Glu	Asp	Tyr	Arg
	130					135					140				
Asp	Glu	Asp	Leu	Thr	Glu	Glu	Gly	Leu	Arg	Ile	Phe	Thr	Ser	Phe	Asp
145					150					155				160	
Pro	Ile	Leu	Gln	Met	Lys	Ala	Glu	Ala	Ser	Val	Asn	Asp	Thr	Phe	Lys
				165					170					175	
Arg	Leu	Thr	Gly												
			180												

<210> 1605

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1605

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acgcgttggt gcggtcgggc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc
60
cattctttgc gggcggggac tgcactggga tattgcggcc catcgctgt gaccacacat
120
cgcagcgctg gaccaccag cccacctggt cccactcgca cgtgccagta ctgtccgcac
180
gcaagaaatc gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac
240
ccagcgctac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca
300
tctttctcct tcacaaagta tttggaatt gtcacttagc tttatcgctc ggaatctgtg
360
aaccgttaac atcccgacgc ggaagctaac tagcaagcag tctaatacac tcccgggcca
420
aatgttg
427

```

<210> 1606

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1606

```

Met Thr Ala Ser Ile Arg Gly Arg Val Leu Ser Val Ile Met Ala Val
 1           5           10          15
Ala Val Ala Leu Gly Leu Ala Val Val Ala Gly Gly Thr Gln Gln Ala
          20           25           30
His Ala Ala His Arg Asp Phe Leu Arg Ala Asp Ser Thr Gly Thr Cys
          35           40           45
Glu Trp Asp Gln Val Gly Trp Trp Val Gln Arg Cys Asp Val Trp Ser
          50           55           60
Gln Ala Met Gly Arg Asn Ile Pro Val Gln Ile Pro Pro Ala Lys Asn
65           70           75           80
Gly Gly Asn Ala Gly Leu Tyr Leu Leu Asp Gly Leu Arg Ala Thr Asp
          85           90           95
Arg Thr Asn Ala
          100

```

<210> 1607

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1607

```

gcacggctcc gctcgcggcc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt
60
tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgtaaa
120
cggatgggac tgatcccgtg cagggcgatc gtgggcggga cgatgatgat cgtggcgacg
180

```


ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc ,
 240
 tttctgttgg cacccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg
 300
 atggaaaaag gactgagccg cgtctacccc gacgcccggg ttatccatgt gccgatggcg
 360
 gacggaggcg aaggcacggg gcagtcgctg gtcgac
 396

<210> 1608
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 1608
 Thr Gly Lys Pro Phe~~Leu~~ Leu Ala Pro Asp Ser Phe Lys Glu Ser Met
 1 5 10 15
 Thr Ala Lys Glu Val Cys Ile Ala Met Glu Lys Gly Leu Ser Arg Val
 20 25 30
 Tyr Pro Asp Ala Arg Phe Ile His Val Pro Met Ala Asp Gly Gly Glu
 35 40 45
 Gly Thr Val Gln Ser Leu Val Asp
 50 55

<210> 1609
 <211> 505
 <212> DNA
 <213> Homo sapiens

<400> 1609
 acgcgtagat gccacagcgc caggacacac gccaccgcgg agccgaggat gatccacatg
 60
 ggctcgactc acatggacgc catggattcg gcagtggaga gcaggccgcg agcttcgcac
 120
 gcggcccgac tgcgtagtcg cgtcatctca gtgcacatct gttcttcccc gtcgatgagg
 180
 ttcgcggcgt aggacatcgt tacgtccagc atgggtggcg tctcagcaat gtcacagccg
 240
 gccttgtgga gggcgaggag ccgagcgcgc gtgcttcctg ctggcacgat gcgttcacgt
 300
 gctgcgttga tgctgctgat actgatatgc aggatgcgcc cggggtcgaa gacggggaat
 360
 ggggtgaatt ggacggtccc ccctggccag cgagtcgttg gacgattcga ctggggacat
 420
 gcgcgagcag ggcgacgaca cgccacggaa cgcggcattc atggacgagg gaacggacat
 480
 ggagcgagaa aaagcgggcg tcgac
 505

<210> 1610
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1610

```

Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1           5           10           15
Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
          20           25           30
Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
          35           40           45
Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
          50           55           60
Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
65           70           75           80
Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
          85           90           95
Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
          100          105          110
Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
          115          120          125
Met

```

<210> 1611

<211> 532

<212> DNA

<213> Homo sapiens

<400> 1611

```

acgcgtgctg cgtttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
60
aaaaatgata ttcaattagg caaaaaagaa tctgtagagg atactgcgaa agtattaggt
120
agaatgttcg atgggtattga attccgtggg ttttcacaac aagctgggtga agatttagcg
180
aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
240
ttagctgatt ttatgacaat aaaagagaat tttggatatc tagaaggaat aaacttaact
300
tacgttggag atggacgtaa taatattgcg cattcattaa tggtagcagg tgctatgtta
360
ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
420
attgcaaaag aaaaagcgag tcaatatggg ggttcagtca tgattacgga taatattgca
480
gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
532

```

<210> 1612

<211> 177

<212> PRT

<213> Homo sapiens

<400> 1612

```

Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1           5           10           15
Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

```


[illegible]

```
<210> 1613
<211> 584
<212> DNA
<213> Homo sapiens
```

```

<400> 1613
nnacgcggttc agccgagaaa tatgctgctt tttgctgcc acctcacaaa tgctacggca
60
cagggcgctcc aggttttgcg cctcctggta cgttgctaca cacttgctca cctcccagcg
120
gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca
180
tatatacaag gaattcacta tatattgggt gaaaggagat cttcccgttc ctgttcttcc
240
tctgccgcat cctgtgaagc gttcagggag gtcgacatgg ataatgtgcg tatgcttggc
300
acggtaaagt gtcgcgggct tgtagatgcg tgtgaacgtt ttcgtgactt gaagaggtcg
360
aagctgatgt gttcgcgtga gctcgatgca gcgcgctgcg ttgcgtgcct tgtggtcgat
420
cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgctc gacaatgcca
480
gtgggcgagg cgatgagttc ctcatattgcg tctttctcga ggtcttggtc catgtccata
540
aacataccaa agctggatgg gtcatacgac ggcgagcat gcat
584

```

```
<210> 1614
<211> 153
<212> PRT
<213> Homo sapiens
```


<400> 1614

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1 5 10 15
 Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Leu Val Arg Cys
 20 25 30
 Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
 35 40 45
 Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
 50 55 60
 Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
 65 70 75 80
 Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
 85 90 95
 Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
 100 105 110
 Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
 115 120 125
 Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
 130 135 140
 Pro Ile Glu Cys Gly Val Val Phe Ser
 145 150

<210> 1615

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1615

gccggccttg cgcagcgcgc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
 60
 tcggtgcttg tcagtgcctg tgatcatcatt tccctgcttg gggctctact ggcctggatc
 120
 ctactgtgcg gtgagacgat gcaggtgccg ggtgaggacg gcacccatgcc gaaactgttc
 180
 ggacggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgtctcc
 240
 cagatatgcc ttgtcatgac ggtgttgttg gacggtgctt acttggcgat ggcgaccctg
 300
 gctgccgcc tcactctggt gccgtacctg ctgtcagccg cattcgcct gaagatggtg
 360
 atc
 363

<210> 1616

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1616

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1 5 10 15
 Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
 20 25 30
 Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln

35	40	45
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn		
50	55	60
Lys His Glu Ala Pro Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser		
65	70	75
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala		
85	90	95
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser		
100	105	110
Ala Ala Phe Ala Leu Lys Met Val Ile		
115	120	

<210> 1617

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1617

```

accggtgact acctgtggga gaagaagggc atcgttccca tcctcaagat tgataagggc
60
ctggctgacg agggctgcc a cgttcgtctc atgaagccga ttcccggcct cgacgagttg
120
gtgcaccgcg ccgtcgagga gaagcacatc ttcggtacca aggagcgctc tgtcatcctg
180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
240
gtgcgcgctg cgggtcttgt gccgatcctc gaaccgaggg tcgacatcca cgctccacat
300
aaggagaagg ctgaggaaag gctgcacaac ctcatccgcg agcacatcga ctctctgccg
360
ctcgacgcca agatcatggt gaagctgacg atcccagagtt ccgaagacct gtatgccgac
420
ctcattgagg atccgaaggt cctacgc
447

```

<210> 1618

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1618

Thr Gly Asp Tyr Leu Trp Glu Lys Lys Gly Ile Val Pro Ile Leu Lys		
1	5	10
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys		
20	25	30
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys		
35	40	45
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys		
50	55	60
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln		
65	70	75
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile		
85	90	95
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile		


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          100          105          110
Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
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Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
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Pro Lys Val Leu Arg
145

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<210> 1619
 <211> 355
 <212> DNA
 <213> Homo sapiens

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<400> 1619
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gatgtgcttc gcatcgctcc ttacgcgctc aaggctgggt ttccgcatgt cgataccgcg
180
cagatttatg gcaatgaagt cgaggctcgt gaagcaattg cgacttcgg cgttcagcgt
240
ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcatc
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<210> 1620
 <211> 118
 <212> PRT
 <213> Homo sapiens

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<400> 1620
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1          5          10          15
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          20          25          30
Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
          35          40          45
Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
          50          55          60
Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
65          70          75          80
Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
          85          90          95
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          100          105          110
Asp Tyr Val Asp Leu Leu
          115

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<210> 1621
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1621

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ctttgccgct ggagctggcc actgcgcgcg gtatgaggga cggcgcggcc acaaagccc
240
acctgcccac ctacctgtg ctcttcttcc tgctgctgct ctcgggggcg ctcggcggcc
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ctcgcgacgc ccgcgcgccc ggaagg
386

<210> 1622

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1622

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Val	Arg	Leu	Gly	Ser	Ala	Gly	Pro	Ala	Gly	His	Val	Arg	Arg	His	Ile
		20						25					30		
Gln	Arg	His	Gly	Ala	Gly	Pro	Arg	Gly	Gly	Gly	Arg	Gln	Arg	Ala	Gly
		35					40					45			
Pro	Arg	Ser	His	Gly	Gln	Gly	Arg	Arg	Arg	Phe	Ala	Ala	Gly	Ala	Gly
		50				55					60				
His	Cys	Ala	Arg	Tyr	Glu	Gly	Arg	Arg	Gly	His	Lys	Ala	Arg	Pro	Ala
65				70					75					80	
His	Leu	Pro	Ala	Ala	Leu	Leu	Pro	Ala	Ala	Ala	Leu	Gly	Gly	Ala	Arg
			85					90						95	
Arg	Pro	Leu	His	Arg	Leu	Pro	Ala	Ala	Pro	Phe	Gly	Leu	Arg	Arg	Ala
			100				105							110	
Ala	Pro	Arg	Pro	Leu	Arg	Ser	Arg	Arg	Pro	Arg	Ala	Arg	Lys		
			115				120						125		

<210> 1623

<211> 314

<212> DNA

<213> Homo sapiens

<400> 1623

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aacttttccg cagtttcaga ggagagtctg caagtgcgag ctgcagtgac tgtgccttgc
180
gcttggcacc caagcagggc atgggagtct taagtgggaa cagggcctca aggacaacag
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 314

<210> 1624
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1624
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 20 25 30
 Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser
 35 40 45
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser
 50 55 60
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr
 65 70 75 80
 Ser Lys Gly Pro Lys Cys Leu Thr Arg Lys Gly Pro Gly Ala Gly Pro
 85 90 95
 Arg Arg Gly Ser Gly His Gln
 100

<210> 1625
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 1625
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 180
 ctgggagcac ctgggaagaa gccgggcat gcaggagacc caacctcacc ctgcattcag
 240
 aaccgggcct tggaatggcc tgatctgagc cctagcacc ctgggaagcc gcccaccttt
 300
 cttctggcct ctgggaagaa gatgggaatt ttaaggccat gggagaagac actcctggat
 360
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 420
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 480
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 619

<210> 1626
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1626
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 20 25 30
 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser
 35 40 45
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu
 50 55 60
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe
 65 70 75 80
 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly
 85 90 95
 Leu Arg Ser Gly His Ser Lys Ala Arg Phe
 100 105

<210> 1627
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 1627
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 240
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 360
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 t
 481

<210> 1628
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1628
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His Gln Val Val Arg Ala Asp Ile Gln Gln Asp Thr Tyr Gly Gly Arg			
	20	25	30
Val Gln Thr Arg Phe Pro Pro Glu Pro Asn Gly Tyr Leu His Ile Gly			
	35	40	45
His Ala Lys Ala Ile Val Thr Asp Phe Gly Val Ala Glu Asp Phe Gly			
	50	55	60
Gly Thr Cys Asn Leu Arg Leu Asp Asp Thr Asn Pro Gly Thr Glu Glu			
65	70	75	80
Thr Glu Tyr Val Glu Ser Ile Val Ala Asp Ile Glu Trp Leu Gly Tyr			
	85	90	95
Ser Pro Ala His Val Val His Ala			
	100		

<210> 1629

<211> 4519

<212> DNA

<213> Homo sapiens

<400> 1629

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1020

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 4519

<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

Pro	Asn	Cys	Trp	Glu	Cys	Pro	Lys	Cys	Tyr	Gln	Glu	Asp	Ser	Ser	Glu
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Lys	Ala	Gln	Lys	Arg	Lys	Met	Glu	Glu	Ser	Asp	Glu	Glu	Ala	Val	Gln
			20					25					30		
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
		35					40					45			
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
	50					55					60				
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
65				70						75				80	
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
			85					90						95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
			100					105					110		
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
	115					120						125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
	130					135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
145				150						155				160	
Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
			165					170						175	
Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Glu
		180						185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly
	195					200						205			
Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
	210					215					220				
Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
225				230						235				240	
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
			245					250						255	
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
		260						265					270		
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
	275					280						285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

290		295		300
Trp Leu Val Asn Arg Leu Pro Gly Leu Lys Asp Leu Leu Leu Ala Gly				
305		310		315
Cys Ser Trp Ser Ala Val Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu				
	325		330	335
Leu Arg Thr Leu Asp Leu Arg Trp Ala Val Gly Ile Lys Asp Pro Gln				
	340		345	350
Ile Arg Asp Leu Leu Thr Pro Pro Ala Asp Lys Pro Gly Gln Asp Asn				
	355		360	365
Arg Ser Lys Leu Arg Asn Met Thr Asp Phe Arg Leu Ala Gly Leu Asp				
	370		375	380
Ile Thr Asp Ala Thr Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu				
385		390		395
Ser Arg Leu Asp Leu Ser His Cys Ser His Leu Thr Asp Gln Ser Ser				
	405		410	415
Asn Leu Leu Thr Ala Val Gly Ser Ser Thr Arg Tyr Ser Leu Thr Glu				
	420		425	430
Leu Asn Met Ala Gly Cys Asn Lys Leu Thr Asp Gln Thr Leu Ile Tyr				
	435		440	445
Leu Arg Arg Ile Ala Asn Val Thr Leu Ile Asp Leu Arg Gly Cys Lys				
	450		455	460
Gln Ile Thr Arg Lys Ala Cys Glu His Phe Ile Ser Asp Leu Ser Ile				
465		470		475
Asn Ser Leu Tyr Cys Leu Ser Asp Glu Lys Leu Ile Gln Lys Ile Ser				
	485		490	495

<210> 1631

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1631

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330

<210> 1632

<211> 92

<212> PRT

<213> Homo sapiens

<400> 1632

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1 5 10 15

Lys Thr Leu Gln Thr Leu Phe His Val Asp Ser Arg Asp Glu Leu Val

	20		25		30										
Glu	Leu	Leu	Gly	Phe	Ser	Lys	Asp	Asp	Ile	Thr	Asn	Gln	Val	Gln	Gln
	35						40					45			
Ala	Val	Gly	Ala	Leu	Gly	Leu	Pro	Pro	Leu	Glu	Asp	Glu	Asn	Ala	Gln
	50					55					60				
Gly	Glu	Asp	Pro	Ala	Ser	Gln	Val	Pro	Pro	Val	Thr	Asp	Glu	Asp	Pro
65					70					75				80	
Thr	Ala	Phe	Phe	Asp	Gln	Val	Pro	Asp	Val	Pro	Leu				
				85					90						

<210> 1633
 <211> 259
 <212> DNA
 <213> Homo sapiens

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 120
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 259

<210> 1634
 <211> 86
 <212> PRT
 <213> Homo sapiens

Xaa	Gly	Thr	Leu	Ala	Ile	Asn	Leu	Val	Gly	Ala	Phe	Val	Leu	Ala	Thr
1				5					10				15		
Leu	Leu	Glu	Leu	Leu	Val	His	Ala	Gly	Pro	Gly	Pro	Gly	Val	Arg	Arg
			20					25				30			
Ala	Val	Arg	Leu	Cys	Ile	Gly	Thr	Gly	Leu	Leu	Gly	Gly	Phe	Thr	Thr
	35					40					45				
Tyr	Ser	Ala	Leu	Thr	Val	Glu	Thr	Gly	Gln	Arg	Val	Met	Ser	Gly	Gln
	50				55					60					
Trp	Leu	Trp	Gly	Ile	Ala	Tyr	Leu	Leu	Thr	Ser	Val	Val	Ala	Gly	Ala
65				70					75					80	
Leu	Leu	Ala	Trp	Val	Met										
				85											

<210> 1635
 <211> 792
 <212> DNA
 <213> Homo sapiens

<400> 1635
 nngtcctttt ttatgaaccg gcggactcgg ttggcgttgt ggggcagggg gtggtggagc
 60

aagatggcgg ctcattctgtc ctacggccga gtgaacctaa acgtgttgcg cgaggcggtg
120
cgtcgcgagc tgcgcgagtt cctggacaag tgcgcaggaa gcaaggcaat agtttgggat
180
gaatacctaa ctggaccctt tggcctgatt gcacagtatt cactattgaa ggaacatgaa
240
gtggaaaaaa tgttcacact taaaggaaat cgtttgccgg cagctgatgt gaagaatata
300
atTTTTTTtg tcagaccag gctagagttg atggatataa tcgctgaaaa cgtgctcagt
360
gaagatagac gaggcccaac gagagatttt catattctgt ttgtgccacg ccgtagcctg
420
ttgtgcgaac agcgggtgaa ggatctgggt gtcttgggat cctttattca caggaggag
480
tacagcttag atctcattcc attcgatggg gatctcttat ccatggaatc agagggtgca
540
ttcaaagagt gctacctgga gggtgaccag acgagcctgt accacgcagc caaggggctg
600
atgaccctgc aagctctgta tggaacgac cccagatct ttgggaaagg agaatgcgct
660
cgggtgagaa cgggtgctt tgtggtgta aaggagggcc cttcacaccc caaaaggag
720
gaggaacggg aagctcctta caaacaatt cagttgatct taattattta tgaatactgt
780
actcatgaat tc
792

<210> 1636

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1636

Met	Ala	Ala	His	Leu	Ser	Tyr	Gly	Arg	Val	Asn	Leu	Asn	Val	Leu	Arg
1				5				10						15	
Glu	Ala	Val	Arg	Arg	Glu	Leu	Arg	Glu	Phe	Leu	Asp	Lys	Cys	Ala	Gly
			20				25					30			
Ser	Lys	Ala	Ile	Val	Trp	Asp	Glu	Tyr	Leu	Thr	Gly	Pro	Phe	Gly	Leu
		35				40					45				
Ile	Ala	Gln	Tyr	Ser	Leu	Leu	Lys	Glu	His	Glu	Val	Glu	Lys	Met	Phe
	50				55					60					
Thr	Leu	Lys	Gly	Asn	Arg	Leu	Pro	Ala	Ala	Asp	Val	Lys	Asn	Ile	Ile
65				70				75					80		
Phe	Phe	Val	Arg	Pro	Arg	Leu	Glu	Leu	Met	Asp	Ile	Ile	Ala	Glu	Asn
			85					90					95		
Val	Leu	Ser	Glu	Asp	Arg	Arg	Gly	Pro	Thr	Arg	Asp	Phe	His	Ile	Leu
		100					105					110			
Phe	Val	Pro	Arg	Arg	Ser	Leu	Leu	Cys	Glu	Gln	Arg	Leu	Lys	Asp	Leu
		115				120					125				
Gly	Val	Leu	Gly	Ser	Phe	Ile	His	Arg	Glu	Glu	Tyr	Ser	Leu	Asp	Leu
	130				135					140					
Ile	Pro	Phe	Asp	Gly	Asp	Leu	Leu	Ser	Met	Glu	Ser	Glu	Gly	Ala	Phe
145				150				155					160		
Lys	Glu	Cys	Tyr	Leu	Glu	Gly	Asp	Gln	Thr	Ser	Leu	Tyr	His	Ala	Ala

[illegible]

```
<210> 1637
<211> 357
<212> DNA
<213> Homo sapiens
```

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<400> 1637
ntcatgatga cacagacccc cgcgcaccca ggcttgatct ccttgcaagg catcggcaaa
60
cgttatcagt tggccgggca aaagctgtcc attctcaatg acgtgtgcct gtccatctcc
120
cgcggtgaca gctgcggcat cctcggcgcc tccggttcg gcaagagcac cctgctcaat
180
atccttggcc tgctggacct gcccaacagc ggccagtacc actttgccgg ccacgatatt
240
ttggcgctca ccccggaaga actgtcggcg atccgcaact cagntnnaat ggttggttcc
300
cagagcttca acctgctgcc ggcgcctcagc gccttggaac acgtcgccct gccctg
357
```

```
<210> 1638
<211> 119
<212> PRT
<213> Homo sapiens
```

```

<400> 1638
Xaa Met Met Thr Gln Thr Pro Ala His Pro Gly Leu Ile Ser Leu Gln
 1          5          10          15
Gly Ile Gly Lys Arg Tyr Gln Leu Ala Gly Gln Lys Leu Ser Ile Leu
          20          25          30
Asn Asp Val Cys Leu Ser Ile Ser Arg Gly Asp Ser Cys Gly Ile Leu
          35          40          45
Gly Ala Ser Gly Ser Gly Lys Ser Thr Leu Leu Asn Ile Leu Gly Leu
          50          55          60
Leu Asp Leu Pro Asn Ser Gly Gln Tyr His Phe Ala Gly His Asp Ile
65          70          75          80
Leu Ala Leu Thr Pro Asp Glu Leu Ser Ala Ile Arg Asn Ser Xaa Xaa
          85          90          95
Met Val Val Phe Gln Ser Phe Asn Leu Leu Pro Arg Leu Ser Ala Leu
          100          105          110
Asp Asn Val Ala Leu Pro Leu
          115

```


<210> 1639
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 1639
 acgcgtgtac gtgcgcgtgt gatttcacat gccctcaaag atattcttac tgaaggcgat
 60
 aaagttatcg ttatgggaca taagcgacca gatttagatg ctataggtgc agctatcgga
 120
 gtttcgcgct ttgcatcaat gaataattta gaggcattta tcgttcttaa tgattctgat
 180
 attgatccga cattacgtcg tgttatggat gagattgata agaaaccgga actaaaagaa
 240
 cgctttgtaa catcggatga ggcttgggat atgatgactt ctaagacgac tgcgttggtt
 300
 gtagatacac ataaacctga aatggtctta gatgaaaatg tcttaaataa agcaaaccgc
 360
 aaagtagtca ttgatcatca tagacgtggc gaaact
 396

<210> 1640
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1640
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu
 1 5 10 15
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu
 20 25 30
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn
 35 40 45
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr
 50 55 60
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu
 65 70 75 80
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr
 85 90 95
 Thr Val Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu
 100 105 110
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg
 115 120 125
 Arg Gly Glu Thr
 130

<210> 1641
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 1641
 ttatcagcaa acgacagcag acaagagctc ctggggctct ggggaaatgc tgctgcctgc
 60

tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg
 120
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctcttcacc
 180
 ttcatcgct ctttcctgt agatgctggc aaggggggac ttgggtggaca aagagagcta
 240
 ctattcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggtta
 300
 aactgtgcct cccctcactc atatgttgaa gtcctaacc taactacctc agaatgggac
 360
 gttatttgga aaaaag
 376

<210> 1642

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1642

Met	Asp	Gly	Leu	Leu	Glu	Trp	Glu	Arg	Leu	Gly	Arg	Ser	Cys	Val	Gly
1				5					10					15	
Trp	Val	Thr	Pro	Asn	Leu	Lys	Asn	Pro	Leu	Arg	His	Met	Trp	Leu	Pro
			20					25					30		
Ser	Ser	Thr	Phe	Ile	Ala	Ser	Phe	Arg	Leu	Asp	Ala	Gly	Lys	Gly	Gly
		35					40					45			
Leu	Gly	Gly	Gln	Arg	Glu	Leu	Phe	Ile	Gln	Glu	Leu	Cys	Tyr	Thr	
	50					55				60					
Ser	His	Phe	Thr	Cys	Ala	Thr	Cys	Ser	Gly	Leu	Asn	Cys	Ala	Ser	Pro
65					70					75					80
His	Ser	Tyr	Val	Glu	Val	Leu	Thr	Leu	Thr	Thr	Ser	Glu	Trp	Asp	Val
				85					90					95	
Ile	Trp	Lys	Lys												
			100												

<210> 1643

<211> 494

<212> DNA

<213> Homo sapiens

<400> 1643

aagcttccag aattccatag gaaccagct gcccttcttg tacctcagtg aggtggagcc
 60
 gagtgtctga gagcaggtgc aggagaaggt gtgggctcca cctgggcctc tgaagccagg
 120
 ggccagaatc cccagatcta ggtccaagag ggggctccat gacctcccca tgctgctcct
 180
 ctgcttggat ccaggatata agaaaggagg ggcacacact gtgggggaac tctggggctc
 240
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc
 300
 cagccccatg ctcacagccc tataagtgca cgatggcacc ctatatcatc taagcggggc
 360
 tgtgctcct gagggcttag ggacaccaga atgagcccc ctcggcggag tctggctctg
 420

ggtgtgtgga gatgccacct gggacgggaa ccccaggtgc atggagcccc actgcagaca
 480
 ccatcccccg tgtg
 494

<210> 1644
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1644
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro
 1 5 10 15
 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys
 20 25 30
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly
 35 40 45
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Gly Ile Leu Ala Pro
 50 55 60
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser
 65 70 75 80
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val
 85 90 95
 Pro Met Glu Phe Trp Lys Leu
 100

<210> 1645
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1645
 nnagatctgt cggataatgg ctttggtctcc gacatggtga cactggtgct tgccatcggg
 60
 aggagccggt ctctgaaaca cgtggccctt ggaaggaact tcaacgttcg gtgcaaggag
 120
 accctggacg atgtcctgca tcggatagcc cagctaatagc aggatgacga ctgtcctttg
 180
 cagtcactat ccgtggctga gtcgcgggtg aagcaggggtg ccagcactct gatccgggct
 240
 ttgggcacca atcctaaact gacagcgctg gatatcagtg gcaatgccat aggggatgct
 300
 ggggccaaga tgctagccaa ggctctacgc
 330

<210> 1646
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1646
 Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val
 1 5 10 15
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg

	20		25		30										
Asn	Phe	Asn	Val	Arg	Cys	Lys	Glu	Thr	Leu	Asp	Asp	Val	Leu	His	Arg
	35						40					45			
Ile	Ala	Gln	Leu	Met	Gln	Asp	Asp	Asp	Cys	Pro	Leu	Gln	Ser	Leu	Ser
	50					55					60				
Val	Ala	Glu	Ser	Arg	Leu	Lys	Gln	Gly	Ala	Ser	Ile	Leu	Ile	Arg	Ala
65					70				75					80	
Leu	Gly	Thr	Asn	Pro	Lys	Leu	Thr	Ala	Leu	Asp	Ile	Ser	Gly	Asn	Ala
			85					90					95		
Ile	Gly	Asp	Ala	Gly	Ala	Lys	Met	Leu	Ala	Lys	Ala	Leu	Arg		
			100					105					110		

<210> 1647

<211> 501

<212> DNA

<213> Homo sapiens

<400> 1647

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aggccgctcg gtgatccgcg gcggcggcag cggcgcttcc tgctaggacc ggccggggcc
60
gtaccggagg ctggggtcc accgaccctc ctcccacccc ctcccactca cctctgggc
120
cgcgactgcg cagggcgggg ccggccgaac catgggccgc ggtgtgggct aagctggtgg
180
ccccggcttt agactggacc ccacaatgtt tgcagagatg ttcaggcacg cgggagctga
240
ttacacacaa tgaatggggg caatgagagc agtggagcag acagagctgg gggccctgtg
300
gccacatctg tcccacatcg ctggcagcgc tgtgtgagag aggggtgctgt gctctacatc
360
agtccaagtg gcacagagct gtcttccttg gagcaaacc ggagctacct cctcagcgat
420
gggacctgca agtgcggtct ggagtgtcca cttaatgtcc ccaagggttt caactttgac
480
cctttggccc cggtgacccc g
501

```

<210> 1648

<211> 84

<212> PRT

<213> Homo sapiens

<400> 1648

Met	Asn	Gly	Gly	Asn	Glu	Ser	Ser	Gly	Ala	Asp	Arg	Ala	Gly	Gly	Pro
1				5				10					15		
Val	Ala	Thr	Ser	Val	Pro	Ile	Gly	Trp	Gln	Arg	Cys	Val	Arg	Glu	Gly
			20				25					30			
Ala	Val	Leu	Tyr	Ile	Ser	Pro	Ser	Gly	Thr	Glu	Leu	Ser	Ser	Leu	Glu
	35					40				45					
Gln	Thr	Arg	Ser	Tyr	Leu	Leu	Ser	Asp	Gly	Thr	Cys	Lys	Cys	Gly	Leu
	50				55				60						
Glu	Cys	Pro	Leu	Asn	Val	Pro	Lys	Val	Phe	Asn	Phe	Asp	Pro	Leu	Ala
65				70				75						80	
Pro	Val	Thr	Pro												

<210> 1649
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1649
 gcgtcggcag ctgaacgggt gctactggca atcggcgaac ccgaactgct ggatacgtcc
 60
 accaactcac ggttgtcgcg catcttctcc aacaaggatga tccggcgcta tccggccttt
 120
 gaagacttcc acgggatgga agaatgcata gatcagatcg ttctgtatct ccgccacgcc
 180
 gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggt
 240
 aaatcgctcc tggccgaaaa gctgaaacag ctgatcgaga aggtccccct ctacgccatc
 300
 aagggtctgc cggctcttca gtcgccccctg ggggtgttca acgccactga agacggcgcg
 360
 atcctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgccccctg
 420
 gcgaccaagc gcctggccga a
 441

<210> 1650
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1650
 Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu
 1 5 10 15
 Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys
 20 25 30
 Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu
 35 40 45
 Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu
 50 55 60
 Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly
 65 70 75 80
 Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro
 85 90 95
 Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu
 100 105 110
 Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile
 115 120 125
 Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg
 130 135 140
 Leu Ala Glu
 145

<210> 1651
 <211> 408

<212> DNA

<213> Homo sapiens

<400> 1651

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nccgcggatc cctccggcat cctgggtatc gtcacctga aggaatccgg agcccgactg
60
cgccgcgagc tttccgaacg cctcgaggat tacgccgcac aaacttccat ggtgcgttcc
120
gtacactccc tcgcattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt
180
accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaagc agaagacgga
240
catggctcgt ggcccgcgga gatgcgcccc gcgtggaatn natgtgggct ttcgcggcag
300
ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
360
ctcggtgccg agcacggccg ccccatgtgg tctgcggcgg gtgaattc
408

```

<210> 1652

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1652

```

Xaa Ala Asp Pro Ser Gly Ile Leu Val Ile Ala Pro Ser Lys Glu Ser
 1           5           10           15
Gly Ala Arg Leu Arg Arg Glu Leu Ser Glu Arg Leu Glu Asp Tyr Ala
          20           25           30
Ala Gln Thr Ser Met Val Arg Ser Val His Ser Leu Ala Phe Ala Leu
          35           40           45
Leu Arg Thr Ala Ala Glu Glu Glu Leu Arg Leu Ile Thr Gly Ala Asp
          50           55           60
Xaa Asp Ala Val Ile Arg Glu Leu Leu Thr Gly Gln Ala Glu Asp Gly
65           70           75           80
His Gly Ser Trp Pro Ala Glu Met Arg Pro Ala Trp Asn Xaa Cys Gly
          85           90           95
Leu Ser Arg Gln Leu Arg Asp Phe Leu Leu Arg Ser Ile Glu Arg Gly
          100          105          110
Leu Gly Pro Gly Asp Leu Glu Ser Leu Gly Ala Glu His Gly Arg Pro
          115          120          125
Met Trp Ser Ala Ala Gly Glu Phe
          130          135

```

<210> 1653

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1653

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ccagcctctc tccgaccgcg tcctttcttcc ggccatacgg cacccaatgt cgcgtcacca
60
tcacccgcgc acatggccat cgctccaccg gacgagttga gtgacaagat ccggtgcatt
120

```


ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc
 180
 ggcattgacg tccagagcag cctgcttatt gctgggtgctc agcatctgta cttgttggac
 240
 gattacttcc agcgtccgaa cggtgaaatc gtcaatgtct gggaagctcc gccacacgag
 300
 cgcgatgcct tgatcgtggc ggccgggtgtc gcacagggtg cacaaagcag cacacccgtg
 360
 cagatatggc gctgggaaca gctccgactt tgtctaga
 398

<210> 1654

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1654

Pro	Ala	Ser	Leu	Arg	Pro	Arg	Pro	Ser	Ser	Gly	His	Thr	Ala	Pro	Asn
1			5					10						15	
Val	Ala	Ser	Pro	Ser	Pro	Ala	His	Met	Ala	Ile	Ala	Pro	Pro	Asp	Glu
		20						25				30			
Leu	Ser	Asp	Lys	Ile	Arg	Cys	Ile	Leu	Arg	Thr	Leu	Glu	Pro	Gly	Asp
	35					40					45				
Ser	Val	Lys	Glu	Ile	Leu	Asn	Thr	Ser	Arg	Val	Val	Gly	Ile	Asp	Val
	50				55					60					
Gln	Ser	Ser	Leu	Leu	Ile	Ala	Gly	Ala	Gln	His	Leu	Tyr	Leu	Leu	Asp
65				70					75					80	
Asp	Tyr	Phe	Gln	Arg	Pro	Asn	Gly	Glu	Ile	Val	Asn	Val	Trp	Glu	Ala
			85					90					95		
Pro	Pro	His	Glu	Arg	Asp	Ala	Leu	Ile	Val	Ala	Ala	Gly	Val	Ala	Gln
		100					105					110			
Val	Ala	Gln	Ser	Ser	Thr	Pro	Val	Gln	Ile	Trp	Arg	Trp	Glu	Gln	Leu
		115				120						125			
Arg	Leu	Cys	Leu												
	130														

<210> 1655

<211> 1115

<212> DNA

<213> Homo sapiens

<400> 1655

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 60
 ctggagggcg agcgtggcaa gaggcccccg ccggagggcg agcctgcagc cccggcgctc
 120
 ggagttcttg ataagctttt cggaagcggt ctctgcagg ctggctgcta cctgggtgtcc
 180
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgag acgtgctgat gaccttccca
 240
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgcgt gggcattccc
 300
 gagctcatcg tgcaagtccg ccaccaccgc cacacgcgtg cctacgcctt ctttgtcacc
 360

gccacgtatg agagcctact ccgagggggc gacgagctgg gtctgcgcaa agcagtgaag
 420
 gccgagtttg gcgggggcac ccgcggcttc tctgcgagg aggactttat ctatgagaat
 480
 gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg
 540
 ctgcagaatt tgcgtgccaa gcagggagaa gcactccaca acgtgcgctt cctggaggac
 600
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcagggtgt cctgtccac
 660
 gagcagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag
 720
 cctctagatg acatctgtga ttactttggt gtgaaaattg ccatgtactt cgcttggtg
 780
 ggcttctaca cgtcggctat ggtataccca gctgtcttcg ggtctgtcct gtacacattc
 840
 acagaggctg atcagacaag ccgggatgtt tctgcggtgg tctttgcctt cttcaacgtg
 900
 atctggtcga cgctgttctt ataggaatgg aagcgtatag gggctgagct gggatataat
 960
 tgggggacgc tggactcatc ctgggaagcc gtggaggagc caccgccccca gttcagggtg
 1020
 gtgcgacgta tcatcccat cactcggggc gaggagttct actaccgcc ctggaagcgg
 1080
 ctgctcttcc agctgcttgt tagcctccgc ctgtg
 1115

<210> 1656

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1656

Met	Ala	Glu	Ala	Ala	Ser	Gly	Ala	Gly	Gly	Thr	Ser	Leu	Glu	Gly	Glu
1				5					10					15	
Arg	Gly	Lys	Arg	Pro	Pro	Pro	Glu	Gly	Glu	Pro	Ala	Ala	Pro	Ala	Ser
			20					25					30		
Gly	Val	Leu	Asp	Lys	Leu	Phe	Gly	Lys	Arg	Leu	Leu	Gln	Ala	Gly	Arg
		35					40					45			
Tyr	Leu	Val	Ser	His	Lys	Ala	Trp	Met	Lys	Thr	Val	Pro	Thr	Glu	Asn
	50					55					60				
Cys	Asp	Val	Leu	Met	Thr	Phe	Pro	Asp	Thr	Thr	Asp	Asp	His	Thr	Leu
65					70					75				80	
Leu	Trp	Leu	Leu	Asn	His	Ile	Arg	Val	Gly	Ile	Pro	Glu	Leu	Ile	Val
				85					90					95	
Gln	Val	Arg	His	His	Arg	His	Thr	Arg	Ala	Tyr	Ala	Phe	Phe	Val	Thr
			100					105					110		
Ala	Thr	Tyr	Glu	Ser	Leu	Leu	Arg	Gly	Ala	Asp	Glu	Leu	Gly	Leu	Arg
		115					120					125			
Lys	Ala	Val	Lys	Ala	Glu	Phe	Gly	Gly	Gly	Thr	Arg	Gly	Phe	Ser	Cys
	130					135					140				
Glu	Glu	Asp	Phe	Ile	Tyr	Glu	Asn	Val	Glu	Ser	Glu	Leu	Arg	Phe	Phe
145					150					155				160	
Thr	Ser	Gln	Glu	Arg	Gln	Ser	Ile	Ile	Arg	Phe	Trp	Leu	Gln	Asn	Leu

[illegible]

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<210> 1657
<211> 333
<212> DNA
<213> Homo sapiens
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<400> 1657
tgtagaggct cgaggtcatc cggaccatgt ggtccaggac gcccccgtec tccggggcccc
60
gcacggagac gcggcgctcag cacggacagc acgcagtctg tgagcctctg caggcagttc
120
ttggagcccc cgggcttccc gcgcgccttc agggggcggg cggcagctcg ggccggtact
180
tctcccaaaa ctgctccggg cagggggcgt ccagcagcct ctgcatgaga cggacggcat
240
ccacgcggcc cgtgtaagtg gccactcct gcggcgacat tccacggcgg ggggtaccctc
300
gcgtggacat ccgcccctgc tagcatcagg gct
333
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<210> 1658
<211> 108
<212> PRT
<213> Homo sapiens
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<400> 1658																
Met	Leu	Ala	Gly	Ala	Asp	Val	His	Ala	Arg	Val	Pro	Pro	Pro	Trp	Asn	
1				5					10					15		
Val	Ala	Ala	Gly	Val	Gly	His	Leu	His	Gly	Pro	Arg	Gly	Cys	Arg	Pro	
			20					25					30			
Ser	His	Ala	Glu	Ala	Ala	Gly	Ala	Pro	Leu	Pro	Gly	Ala	Val	Leu	Gly	
		35					40					45				
Glu	Val	Pro	Ala	Arg	Ala	Ala	Ala	Arg	Pro	Leu	Lys	Arg	Arg	Gly	Lys	
	50					55					60					
Pro	Ala	Gly	Ser	Lys	Asn	Cys	Leu	Gln	Arg	Leu	Thr	Asp	Cys	Val	Leu	
65					70					75					80	
Ser	Val	Leu	Thr	Pro	Arg	Leu	Arg	Ala	Gly	Pro	Gly	Gly	Arg	Gly	Arg	

85 90 95
 Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu
 100 105

<210> 1659
 <211> 382
 <212> DNA
 <213> Homo sapiens

<400> 1659
 nnaagcttat ttgttattac taatatttttc cgtgaccaga tgggccgcta tggtagagatt
 60
 tacacaactt acaagatgat tttggatgct attcgtaagg tgcctactgc cactgttctc
 120
 cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt
 180
 ggttttgact tggagaaagg cccagcccaa ctggctcact ataataccga aggaattctc
 240
 tgtcccgact gccaaagcat cctcaaatat gagcataata cctatgcaaa cttgggcgcc
 300
 tatactctgtg aagactgtgg atgtaaactg cctgatctcg actatcgctt gacagaactg
 360
 gttgagttaa ccaacaatcg cn
 382

<210> 1660
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 1660
 Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg
 1 5 10 15
 Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg
 20 25 30
 Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe
 35 40 45
 Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu
 50 55 60
 Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu
 65 70 75 80
 Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala
 85 90 95
 Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp
 100 105 110
 Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg
 115 120 125

<210> 1661
 <211> 524
 <212> DNA
 <213> Homo sapiens

<400> 1661

acgcgtcgat gatcatggag aagacgcggg ccggctcctt gcctgtgacc ttcttgtaca
 60
 gctgctgggta gtagagctcc aggctctcga ggaaggccac gtagcccttg tggccggctcc
 120
 gctgcaggat gtccaggagc acacccactt tccgtttgcg gatgaccagg ttgggggtcgc
 180
 tgagcacctg ctctcatca tcagggttca ggaccttgca ctgccgcagg taagggtgtga
 240
 tgcgtgaggg gtcgatgacc gaggtgagcg tcacccggaa gccctccagg acgttccagc
 300
 actcgtcatc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtgtggggc
 360
 agtgctgaga gcgatgccgg ctctgcccc caccggggcc cagctccac tccttctcag
 420
 acgctggggc agggctctcg tcagggcacg gagggggatc agcccaggcg catccaggag
 480
 aggtgcccag ctccgtgtcc catcccacgc ttgatcgtcg catg
 524

<210> 1662

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1662

Met	Gln	Arg	Ser	Ser	Val	Gly	Trp	Asp	Thr	Glu	Leu	Gly	Thr	Ser	Pro
1				5					10					15	
Gly	Cys	Ala	Trp	Ala	Asp	Pro	Pro	Arg	Cys	Pro	Asp	Glu	Ser	Pro	Gly
			20					25				30			
Pro	Ala	Ser	Glu	Lys	Glu	Trp	Glu	Leu	Gly	Pro	Gly	Gly	Gly	Arg	Ser
			35				40					45			
Arg	His	Arg	Ser	Gln	His	Cys	Pro	Thr	Leu	Pro	Ser	Leu	Pro	Ala	Glu
			50			55					60				
Ala	Met	Ser	Asp	Tyr	Glu	Asn	Asp	Asp	Glu	Cys	Trp	Asn	Val	Leu	Glu
65					70				75					80	
Gly	Phe	Arg	Val	Thr	Leu	Thr	Ser	Val	Ile	Asp	Pro	Ser	Arg	Ile	Thr
			85					90					95		
Pro	Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Glu	Gln
			100					105					110		
Val	Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val
			115				120					125			
Leu	Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe
			130			135					140				
Leu	Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr
145					150					155				160	
Gly	Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala		
				165						170					

<210> 1663

<211> 321

<212> DNA

<213> Homo sapiens

<400> 1663

nnagtacttg tcatgattac gcctagtttg ggtatctatt tctctcagcg ttctcagatc
 60
 tcccgaaccc aagacgacga ggctcggaca cgcgcttcta tctcgaccct tcaagacgag
 120
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg
 180
 gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggtaaggt cattggatcg
 240
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg
 300
 caagaggctt gcggatcagt c
 321

<210> 1664

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1664

Xaa	Val	Leu	Val	Met	Ile	Thr	Pro	Ser	Leu	Gly	Ile	Tyr	Phe	Ser	Gln
1				5					10					15	
Arg	Ser	Gln	Ile	Ser	Arg	Thr	Gln	Asp	Asp	Glu	Ala	Arg	Thr	Arg	Ala
			20					25					30		
Ser	Ile	Ser	Thr	Leu	Gln	Asp	Glu	Val	Lys	Arg	Trp	His	Asp	Pro	Asp
			35				40					45			
Tyr	Val	Arg	Ala	Gln	Ala	Arg	Ser	Gln	Leu	Gly	Trp	Val	Met	Pro	Gly
			50				55				60				
Glu	Thr	Gly	Tyr	Gln	Val	Ile	Gly	Glu	Asn	Gly	Lys	Val	Ile	Gly	Ser
65				70					75				80		
Thr	Thr	Ser	Leu	Asp	Glu	Lys	Asp	Pro	Ala	Ser	Glu	Ala	Ser	Ala	Asp
			85					90					95		
Ala	Arg	Trp	Trp	Gln	Glu	Ala	Cys	Gly	Ser	Val					
			100					105							

<210> 1665

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1665

gcttccgaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggc
 60
 ggccccgacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc
 120
 atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct
 180
 gcggcaacag atgacttttt agagtctggt gatttggtgt tgctcgacgt caaatcgga
 240
 gatgaagaaa tctaccgtgc cctcaccggc agagcggtgc aacctaccat cgattttggt
 300
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggg tcggttggtt ccccggatac
 360
 accgactcgg tagagaacgt ggaaaagggt gccgatatcg tccgcagatg gcgcaccgct
 420

gtttcacgcg t
431

<210> 1666
<211> 143
<212> PRT
<213> Homo sapiens

<400> 1666
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg
1 5 10 15
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln
20 25 30
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile
35 40 45
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Ala Thr Asp
50 55 60
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly
65 70 75 80
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr
85 90 95
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile
100 105 110
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu
115 120 125
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg
130 135 140

<210> 1667
<211> 370
<212> DNA
<213> Homo sapiens

<400> 1667
tccgctgaga ccagcgttgg tgacttccca ggtgagactg tccgcaccat ggccaagatc
60
gttgagtcta ctgaggcccg tggcttggac aagatcgcca agatcgactg ggatccgcac
120
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag
180
ttcatcgtag cctttaccaa gtccggtgac accgcccgtc gtatcgctcg tctgcgtccg
240
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagaccct cgcttgggtc
300
tggggcgctc acgccgtcgt taccgccgtg tttaagaatg cggaggagct gtaccgctgg
360
gttaacgcgt
370

<210> 1668
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1668

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Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1           5           10           15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
          20           25           30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
          35           40           45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
          50           55           60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
65           70           75           80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
          85           90           95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
          100          105          110
Asn Ala Glu Leu Tyr Arg Trp Val Asn Ala
          115          120

```

<210> 1669

<211> 1491

<212> DNA

<213> Homo sapiens

<400> 1669

```

ggatcctgca gtggtgatct gtcacgtca cgtcacagaa ctgaacatgg aaatgaacaa
60
cgaaaactcc acccccttct caaacgagtt attcctagct ccgccccag tccttgctc
120
tcccagcctt ggtggttaatt agcttgaaag tgggaacgag agtgcggtcc gcaaagaaag
180
gacttctggt tagacactga aatacaaaac gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaag accctcaaaa actgcctttc cttctgctac caaaacttgg
300
gccctagaaa gtggctgctg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gctgtgtttt ctgaggggga gtcattggcag cttgtgctgg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
540
aggagtccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaaataatt taacaatttc atttatgcta tatctgtgtc cactacagag
660
tctacggtga aggtgtgtg gagcgagtgt gtctagtga ctcgaacacc aacgcgttct
720
tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
780
aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
840
tgtggcttct gcacctgtta tacttttgga tacgagttag ctccacttag cttcgtaaag
900

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attagaaatt tccatgaaac acttaccac atataaattc tgtgtaaagc tttatttttt
 960
 tccccaccta ctttaatttt ttttaaaaag tgaaataaga ggaaaaactc ttataaaata
 1020
 taagggttaa catacgagag agcgaggaac accccggagg ctgccggtgc gtgtggcttc
 1080
 atgtttctgt gctacatgag tctagtgtcc tcattttcca ttgtgacaac ctttctcccc
 1140
 ccatcacact gtcaatgagc tctaggcaaa gctgccccgt ttgcttttaa cctaagggat
 1200
 gctgtgggtt gggtgactac atttgactac caccactgaa ggcgggcgac gtctgaagcg
 1260
 gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcca
 1320
 ggtcaagggtc gtctgggttc tcaggagcca gtctgtgcca cagaaccatc ggcagctgcc
 1380
 ttcgtaaggc acctcggctt ggcattcgga aaaccacccc atcttgccag agtccttgg
 1440
 tccttgggta gcaaaagccg tatgcgatct aaatcaagct ttcaatcatg a
 1491

<210> 1670

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1670

Met	Pro	Asp	Trp	Phe	Phe	Pro	Phe	Leu	Ala	Pro	Ser	Thr	Ser	Cys	His
1				5					10					15	
Asp	Ser	Pro	Ser	Glu	Asn	Thr	Ala	Pro	Pro	Leu	Pro	Phe	Ser	Val	Met
			20					25					30		
Ser	Ile	Cys	Ser	Thr	Pro	Gln	Pro	Leu	Ser	Arg	Ala	Gln	Val	Leu	Val
		35				40					45				
Ala	Glu	Gly	Lys	Ala	Val	Phe	Glu	Gly	Leu	Ser	Lys	Lys	Glu	Asp	Gly
	50					55					60				
Ala	Ala	Leu	Pro	Arg	Ala	Arg	Trp	Gln	Ser	Val	Cys	Ile	Ser	Val	Ser
65				70					75					80	
Asn	Gln	Lys	Ser	Phe	Leu	Cys	Gly	Pro	His	Ser	Arg	Ser	His	Phe	Gln
				85				90					95		
Ala	Asn	Tyr	His	Gln	Gly	Trp	Glu	Arg	Gln	Gly	Leu	Gly	Ala	Glu	Leu
			100					105					110		
Gly	Ile	Thr	Arg	Leu	Arg	Arg	Gly	Trp	Ser	Phe	Arg	Cys	Ser	Phe	Pro
		115					120					125			
Cys	Ser	Val	Leu												
			130												

<210> 1671

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1671

gcgcgcggg gcgggaggac gccagtcgtc tcccccccc tcaccacgac acgaccatta
 60

tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcggaa acccacggcg
 120
 gcaccccgca tgaagccggt gtcgcgggtc ggggacacga ttttcgctgg cgctcgctcg
 180
 gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttcct catgaagacg
 240
 gcagccccga cgttggtggc taacaccgat aactttttca cgtccccggc ttggacaacg
 300
 gatcagaacc cgccggcctt tggatatccag gccctgctat ggacgacagt catctcatcc
 360
 ctgcttgccc tgctcatcgc agtgccgctc tcggtgggca tcgctctgtt tatcaccag
 420
 ctgcaccta gg
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
1			5					10					15		
Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
		20						25					30		
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
	35						40					45			
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
50					55					60					
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65				70					75					80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
			85					90					95		
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
		100					105					110			
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
	115					120					125				
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
130						135					140				

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

tcgcgagcac actccagcct ctggggcgctc tgccagggcc tctgtgtttt gatatactct
 60
 gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtaacccca
 120
 ggctcccagc gtctttttcca tgagccaaag gcctggctcct ggaggggggt gccctgcagc
 180
 tctgtggccc ttcttccagg ggagttcatt gctgggggtg gccctgcagg gacctccact
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg
 300
 atgcaaattc tccacttggtg aataaagaaa tagagagcca ttgctaagaa ctatgtttac
 360
 gcagggttag tgctgggacc cagaaccagt caactggttt t
 401

<210> 1674
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1674
 Met Ala Leu Tyr Phe Phe Ile His Lys Trp Arg Ile Cys Ile Leu Phe
 1 5 10 15
 Ser Gln Ile Leu Pro Ser Pro Cys Cys Ile Leu Leu Leu Pro Leu Pro
 20 25 30
 Ser Thr Val Glu Val Pro Ala Gly Pro Pro Pro Ala Met Asn Ser Pro
 35 40 45
 Gly Arg Arg Pro Ala Glu Leu Gln Gly Thr Pro Leu Gln Asp Gln Ala
 50 55 60
 Phe Gly Ser Trp Lys Arg Arg Trp Glu Pro Gly Val Thr Glu Gln Thr
 65 70 75 80
 Gly Leu Cys Arg Ala Phe Ile Ser Ser Phe Thr Ala Arg Ser Glu Tyr
 85 90 95
 Ile Lys Thr Gln Arg Pro Trp Gln Thr Pro Gln Arg Leu Glu Cys Ala
 100 105 110
 Arg

<210> 1675
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1675
 gccggcgac ccacctggga cgtggtgaaa tcggcaaaac tcacctcttt agctacctgc
 60
 gcgccaaccg caccggcagc ctccacacg cctctagag cgctgctgga cagaatggct
 120
 tgattgtttg gcatgctctc aggatacccg tttagccagg aaacaccggt aggcttgcta
 180
 ctatgcgagc agccgacgca cgggtagagg gaattccac cacagtcct cgcactccac
 240
 ccgcacacgc cctgggaacc gtcaccgcg gtaccacgg gtcaatcggc tccgaaaatg
 300
 cgaccgctgg atgtgccacc accccgcnca tccgcagtgc gctccgtaac gccgtctgca
 360
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg
 420
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 480
 ctgttgagat ggctacgcgt
 500

<210> 1676
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 1676
 Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp
 1 5 10 15
 Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg
 20 25 30
 Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr
 35 40 45
 Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr
 50 55 60
 Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu
 65 70 75 80
 Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu
 85 90 95
 Arg

<210> 1677
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 1677
 nntcatgatt tcctcaatga tgccaagggtg atggaggccg gctataacctg ggtgcagggtg
 60
 gatttgcgcg gtacgggtgc ttctactggg tgtttgngac tggaatggtc cnnccggggag
 120
 cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtac agccgtggtc gaatggtcgg
 180
 gtggggcttt tcggtaaate ctacgatggg gggacggggg cttattgctg caggtaatca
 240
 gccgcggggg ttggctgctg tgggtggcgca ggagccagct atggagccct acattacct
 300
 gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat
 360
 tgctgcctcc cccggccgtg tccttcacga cactcccgaa tatatgaaga acagtgtcta
 420
 cgagggtggcc caccgcatt gcctgtccga caatttgctg aattctttag accccatccg
 480
 tagccacaaa taatgggagg gatcggtctt tccctcacca agacgcataa tttccccgt
 540
 gcccttggtt atttecgtg gccttattga ggacaatacg gagcctgatg gtttggtgga
 600
 attgttgaag gaccgtaagg ctccgacgcg t
 631

<210> 1678
 <211> 78
 <212> PRT

<213> Homo sapiens

<400> 1678

Xaa	His	Asp	Phe	Leu	Asn	Asp	Ala	Lys	Val	Met	Glu	Ala	Gly	Tyr	Thr
1				5				10					15		
Trp	Val	Gln	Val	Asp	Leu	Arg	Gly	Thr	Gly	Ala	Ser	Thr	Gly	Cys	Leu
		20					25					30			
Xaa	Leu	Glu	Trp	Ser	Xaa	Gly	Glu	Gln	Gln	Asp	Val	Val	Thr	Ala	Val
	35					40				45					
Glu	Trp	Ala	Ala	Val	Gln	Pro	Trp	Ser	Asn	Gly	Arg	Val	Gly	Leu	Phe
	50				55				60						
Gly	Lys	Ser	Tyr	Asp	Gly	Gly	Thr	Gly	Ser	Tyr	Cys	Cys	Arg		
65					70				75						

<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

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nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggctctcat tccttcccac
60
agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
120
cagctgatct gccctatctg cctggagatg tttaccaagc cagtggatcat cttgccgtgc
180
cagcacaacc tgtgccggaa gtgtgccaat gacatcttcc aggctgcaaa tccctactgg
240
accagccggg gcagctcagt gtccatgtct ggaggccggt tccgctgccc tacctgccgc
300
cagcaggtga tcatggatcg tcacggagtg tacggcctgc agaggaaacct gctggtggag
360
aacatcatcg acatctacaa acaggagtgc tccagtcggc cgctgcagaa gggcagtcac
420
cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
480
cccacctgct ccatgtgcaa ggtgtttggg atccacaagg cctgcgaggt g
531

```

<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

Met	Glu	Asn	Leu	Glu	Lys	Gln	Leu	Ile	Cys	Pro	Ile	Cys	Leu	Glu	Met
1				5				10					15		
Phe	Thr	Lys	Pro	Val	Val	Ile	Leu	Pro	Cys	Gln	His	Asn	Leu	Cys	Arg
		20				25					30				
Lys	Cys	Ala	Asn	Asp	Ile	Phe	Gln	Ala	Ala	Asn	Pro	Tyr	Trp	Thr	Ser
	35				40					45					
Arg	Gly	Ser	Ser	Val	Ser	Met	Ser	Gly	Gly	Arg	Phe	Arg	Cys	Pro	Thr
	50				55					60					
Cys	Arg	His	Glu	Val	Ile	Met	Asp	Arg	His	Gly	Val	Tyr	Gly	Leu	Gln

65		70		75		80									
Arg	Asn	Leu	Leu	Val	Glu	Asn	Ile	Ile	Asp	Ile	Tyr	Lys	Gln	Glu	Cys
		85							90					95	
Ser	Ser	Arg	Pro	Leu	Gln	Lys	Gly	Ser	His	Pro	Met	Tyr	Lys	Glu	His
		100						105					110		
Glu	Asp	Glu	Lys	Ile	Asn	Ile	Tyr	Cys	Leu	Thr	Cys	Glu	Val	Pro	Thr
	115						120					125			
Cys	Ser	Met	Cys	Lys	Val	Phe	Gly	Ile	His	Lys	Ala	Cys	Glu	Val	
	130						135					140			

<210> 1681

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1681

gagttccaca actgcaggac agatgacaag acgttccaat gtgagatgtg tttcagattc
60
ttttccacca acagcaacct ctccaagcac aagaagaagc acggcgacaa gaagtttgcc
120
tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg
180
cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac
240
ctggtccggtt acaagaagga gccttccggg tgcccgggtgt gtggcaaggt gttctcctgc
300
cggagcaata tgaacaagca cctgctcacc cacggcgaca agaagtacac ctgcgagatc
360
tgcgggcgca agttcttccg cgtggatgtg ctcagg
396

<210> 1682

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1682

Glu	Phe	His	Asn	Cys	Arg	Thr	Asp	Asp	Lys	Thr	Phe	Gln	Cys	Glu	Met
1				5					10					15	
Cys	Phe	Arg	Phe	Phe	Ser	Thr	Asn	Ser	Asn	Leu	Ser	Lys	His	Lys	Lys
		20						25				30			
Lys	His	Gly	Asp	Lys	Lys	Phe	Ala	Cys	Glu	Val	Cys	Ser	Lys	Met	Phe
	35						40					45			
Tyr	Arg	Lys	Asp	Val	Met	Leu	Asp	His	Gln	Arg	Arg	His	Xaa	Gly	Arg
	50					55					60				
Ser	Ala	Ala	Ser	Glu	Ala	Xaa	Glu	Asp	Leu	Glu	Ala	Gly	Gly	Glu	Asn
65				70					75					80	
Leu	Val	Arg	Tyr	Lys	Lys	Glu	Pro	Ser	Gly	Cys	Pro	Val	Cys	Gly	Lys
		85							90					95	
Val	Phe	Ser	Cys	Arg	Ser	Asn	Met	Asn	Lys	His	Leu	Leu	Thr	His	Gly
		100						105					110		
Asp	Lys	Lys	Tyr	Thr	Cys	Glu	Ile	Cys	Gly	Arg	Lys	Phe	Phe	Arg	Val
	115						120					125			
Asp	Val	Leu	Arg												

130

<210> 1683

<211> 676

<212> DNA

<213> Homo sapiens

<400> 1683

```

nncggccgga caggtcccgga gcagccccgc ccaacatgga cccagacccc caggcggggcg
60
tgcaggtggg catgcgggtg gtgcgcggcg tggaccggaa gtggggccag caggacggcg
120
gcgagggcgg cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tcgacacccg
180
accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc
240
agggcgcgca cgacctgctg ctgtacgaca acgcccagat cggcgtcccg caccccaaca
300
tcattctgtga ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
360
gcctggacta cgacctctgc acgcagtgtc acatgcacaa caagcatgag ctgcgccacg
420
ccttcgaccg ctacgagacc gctcactcgc gccctgtcac actgagtccc cgccagggcc
480
tcccgaggat cccactaagg ggcatcttcc agggagcgaa ggtggtgcga ggccccgact
540
gggagtgggg ctcacaggat ggtgagtgga ggcagagggg cggggtcagg gctgggctgt
600
ggctggctca tggctcagcc ttagcctgct gggggggcct ctttccccag gaggggaaggg
660
aaaccggggc gccgga
676

```

<210> 1684

<211> 154

<212> PRT

<213> Homo sapiens

<400> 1684

```

Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr
1      5      10      15
Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr
20     25     30
Gly Ser Gly Ala Ser Arg Thr Ala Arg Ala Ala Trp Ala Arg Trp
35     40     45
Trp Ser Leu Ala Ala Thr Ala Pro Arg His Pro Thr Ala Gln Trp
50     55     60
Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr
65     70     75     80
Arg Ala Arg Thr Thr Cys Cys Cys Thr Thr Thr Pro Arg Ser Ala Ser
85     90     95
Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly
100    105    110
Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg

```


	115		120		125										
Ser	Ala	Thr	Cys	Thr	Thr	Ser	Met	Ser	Ser	Pro	Thr	Pro	Ser	Thr	Ala
	130						135				140				
Thr	Arg	Pro	Leu	Thr	Arg	Ala	Leu	Ser	His						
145							150								

<210> 1685

<211> 2740

<212> DNA

<213> Homo sapiens

<400> 1685

```

ngaggaggag cccgcggcgg ctccggggaa agggaggggg gcgctccgca gccgccgccg
60
cccaggggct ggcgagggaa aggcgtacgc gctcagcaga ggggcggcag cggcggggag
120
ggggcctccc cttctccatc ctctcttctt gcgggcaaaa cccaggaac cggcagcaga
180
aactccggaa gcggcggtgc ggggggcygc agcgggtggtg gagggagcta ctggaaagaa
240
ggatgtctgc agtctgagct catccagttc catctcaaga aggagcgggc ggcagcggcg
300
gcggccgcgg ctcatatgca cgctaagaac ggcgggcgca gcagtagccg cagctccccg
360
gtgtctggcc cccctgccgt ttgcgagacc ctggccgtcg cctccgcctc cccaatggcg
420
gcggcgggcg agggcccca gcagagcgca gagggcagcg cgagcggcgg gggcatgcag
480
gcggcagcgc ccccttcgtc gcagccgcac ccgcagcagc tccaagagca ggaagaaatg
540
caagaggaga tggagaagct gcgagaggaa aacgagactc tcaagaacga gatcgatgag
600
ctgagaaccg agatggacga gatgaggagc actttcttcg aggaggatgc ctgtcaactg
660
caggaaatgc gccacgagtt ggagagagcc aacaaaaact gccggatcct gcagtaccgc
720
ctccgcaaag ccgagcgcaa aaggctccgc tacgccaga ccggggaaat cgacggggag
780
ctgttgcgca gcctggagca ggacctcaag gttgcaaagg atgtatctgt gagacttcac
840
catgaattag aaaatgtgga agaaaagaga acaacaacag aagatgaaaa tgagaaactg
900
aggcaacagc tcatagaagt tgaaattgca aagcaagctt tacagaatga actggaaaaa
960
atgaaagagt tacccttaaa aagaagagga agcaagatt tgccaaaatc tgaaaaaaag
1020
gctcaacaga ctcccacaga ggaggacaat gaagatctga agtgccagct gcagtttggt
1080
aaggagaag ccgctttgat gagaaagaaa atggccaaga ttgataaaga aaaggacaga
1140
tttgaacag agctccagaa gtacagatcc ttttatgggg atctggacag tcctttgccc
1200
aaaggagaag ccggaggccc tcccagcact agggaggccg agctcaagct acgggtaagg
1260

```


ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagaac
1320
agaggcctga aggcggaact ggacgacctt aggggcgatg acnnttcaac ggctcggcca
1380
accgctcat gaggnagca gagcgaatcc ctgtcggagc tgcggcagca cctgcagctg
1440
gtggaagacg agacggagct gctgcggagg aacgtggccg acctggagga gcagaacaag
1500
cgcatcacgg cggagctcaa caagtacaag tacaagnntc cggcggccac gacagcgcg
1560
ggcaccacga caacgccana gaccgaggcc ctgcaggagg agctgaaggc ggcgcgcctg
1620
cagatcaacg agctcagcgg caaggtcatg cagctgcagt acgagaaccg cgtgcttatg
1680
tccaacatgc agcgtacga cctggcctcg cacctgggca tccgcggcag ccccgcgac
1740
agcgacgccc agagcgacgc gggcaagaag gagagcgacg acgactcgcg gcctccgcac
1800
cgcaagcgcg aaggggcccat cggcggcgag agcgactcgg aggaggtggn cgcaacatcc
1860
gctgcctcan cgcccactcg ctcttctac ccggcgcccg ggccctggcc caagagcttc
1920
tccgatcggc agcagatgaa ggacatccgc tcggaggccg agcgctggg caagaccatc
1980
gaccggtca tcgccgacac gagcaccatc atcaccgagg cgcgcacnt acgtggccaa
2040
cggggacctg ttncggact catggacgag gaggacgacg gcagccgcat ccgggagcac
2100
gagctgctct accgcatcaa cgctcagatg aaggccttcc gcaaggagct gcagacctc
2160
atcgaccgcc tcgaggtgcc caagtctgcg gacgaccgcg gcgccgagga gccatttcc
2220
gtgagtcaga tgttccagcc tatcatttta cttattctca ttcttgatt atttcatca
2280
ctttcttaca caacaatatt taaacttgtc ttcttttta cactgtttt tgtactgtaa
2340
atctttcatc atttaccatt cattgtagta ttttcagttt gtttattttg ttcaccctc
2400
aagacaagaa gtaaaagaag tataatttct gtagtaacca atgctataaa aacactgaag
2460
actgcttatt tctttacaaa gatacaactc atcttaccaa gaccaaattc aataagaagc
2520
ccaaacacta aaatatttca ggtaagaaag tgtgacattt ttctgtatga attgttttaa
2580
tttttacttc ttttttcat cctgtttgtc tctcttgat aaataattgg catactgaat
2640
ataaaaatgg actacatgtc tcataattat ttctcagtag ttcactatta ttattcaaaa
2700
gctggacgga cattcacaat ttggtcacat ttccaaaaag
2740

<210> 1686

<211> 463

<212> PRT

<213> Homo sapiens

<400> 1686

Xaa Gly Gly Ala Gly Gly Gly Ser Gly Glu Arg Glu Gly Gly Ala Pro
 1 5 10 15
 Gln Pro Pro Pro Pro Arg Gly Trp Arg Gly Lys Gly Val Arg Ala Gln
 20 25 30
 Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser
 35 40 45
 Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser
 50 55 60
 Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Gly Ser Tyr Trp Lys Glu
 65 70 75 80
 Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg
 85 90 95
 Ala Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly
 100 105 110
 Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys
 115 120 125
 Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Glu
 130 135 140
 Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Gly Met Gln
 145 150 155 160
 Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu
 165 170 175
 Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu
 180 185 190
 Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met
 195 200 205
 Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg
 210 215 220
 His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg
 225 230 235 240
 Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu
 245 250 255
 Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala
 260 265 270
 Lys Asp Val Ser Val Arg Leu His His Glu Leu Glu Asn Val Glu Glu
 275 280 285
 Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu
 290 295 300
 Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys
 305 310 315 320
 Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys
 325 330 335
 Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp
 340 345 350
 Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg
 355 360 365
 Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu
 370 375 380
 Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro
 385 390 395 400
 Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

				405					410					415		
Leu	Arg	Leu	Arg	Leu	Val	Glu	Glu	Glu	Ala	Asn	Ile	Leu	Gly	Arg	Lys	
				420					425					430		
Ile	Val	Glu	Leu	Glu	Val	Glu	Asn	Arg	Gly	Leu	Lys	Ala	Glu	Leu	Asp	
				435				440						445		
Asp	Leu	Arg	Gly	Asp	Asp	Xaa	Ser	Thr	Ala	Arg	Pro	Thr	Arg	Ser		
				450			455					460				

```
<210> 1687
<211> 326
<212> DNA
<213> Homo sapiens
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<400> 1687
gtgcacacag gtgagcgctc ctacaagtgt ccacactgcg actatgcagg taccagtcg
60
ggctcgctca agtatcacct tcagcgtcac caccgagagc agaagaacag tgcggggtcc
120
tgggcctccc ccagaacccc cgccaccttc ccagcggggc tctactgcagc cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ttcgagcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggaccctgcg
300
aaacggcgat gtggtgaagc cgaact
326
```

```
<210> 1688
<211> 89
<212> PRT
<213> Homo sapiens
```

```
<400> 1688
Val His Thr Gly Glu Arg Pro Tyr Lys Cys Pro His Cys Asp Tyr Ala
  1              5          10           15
Gly Thr Gln Ser Gly Ser Leu Lys Tyr His Leu Gln Arg His His Arg
             20         25           30
Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
            35        40           45
Thr Phe Pro Ala Gly Leu Thr Ala Ala Val Arg Ser Gln Ala Asn
      50          55           60
Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
65       70          75           80
Phe Glu Gln His Arg Thr Arg Val Pro
            85
```

```
<210> 1689
<211> 301
<212> DNA
<213> Homo sapiens
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```
<400> 1689
nggggaagcc atggctgctt aaggacaatg cactgtcagc tcggtgatgt cttgatttgg
60
```


tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa
 120
 ttggcctttt cccagttccat taagcctaaa caaaccacat cactttacat caggcagatc
 180
 atgtgggtacc agaattttcc agtttggcgg actatcttga tcaaatacaac taaattattg
 240
 ccactgtggc tatctgtgaa agaacacaat gaagaaaatc tggagcctta tctcatactc
 300
 a
 301

<210> 1690

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1690

Met	His	Cys	Gln	Leu	Gly	Asp	Val	Leu	Ile	Trp	Ser	Gly	Ile	Leu	His
1			5					10					15		
Leu	Val	Ile	Ala	Asp	Asn	Thr	His	Val	Ala	Pro	Arg	Lys	Lys	Lys	Leu
		20						25					30		
Ala	Phe	Ser	Gln	Ser	Ile	Lys	Pro	Lys	Gln	Thr	Thr	Ser	Leu	Tyr	Ile
		35						40					45		
Arg	Gln	Ile	Met	Trp	Tyr	Gln	Asn	Phe	Pro	Val	Trp	Arg	Thr	Ile	Leu
	50						55				60				
Ile	Lys	Ser	Thr	Lys	Leu	Leu	Pro	Leu	Trp	Leu	Ser	Val	Lys	Glu	His
65					70					75					80
Asn	Glu	Glu	Asn	Leu	Glu	Pro	Tyr	Leu	Ile	Leu					
				85						90					

<210> 1691

<211> 483

<212> DNA

<213> Homo sapiens

<400> 1691

nacgcgttcc ggtatgccga tgggcccgggtg ctgctggggcg tccgccggcg gcgcgggtgag
 60
 ttgtgccttg aagtgtggga ccgcggcccc ggcattcctc aagacaaaca aaagtcattc
 120
 ttcgaagaat tcaaacgcct ggacagtcac cagacccgcg ccgagaaaagg cctgggcctg
 180
 ggcctggcga ttgccgacgg cttgtgccgc gtgctcgggc atcgcttgag cgtgcgttcg
 240
 tggccgggca agggcagcgt gtccagcgtg cgcgtgccgt tggcgcgcac ccaggtcagc
 300
 gcgcctgcc aagccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt
 360
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc
 420
 gaagtctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tgttggtgta ggggtgtgcg
 480
 ccg
 483

<210> 1692
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 1692
 Xaa Ala Phe Arg Tyr Ala Asp Gly Pro Val Leu Leu Gly Val Arg Arg
 1 5 10 15
 Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile
 20 25 30
 Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp
 35 40 45
 Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile
 50 55 60
 Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser
 65 70 75 80
 Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg
 85 90 95
 Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro
 100 105 110
 Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu
 115 120 125
 Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro
 130 135 140
 Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg
 145 150 155 160
 Pro

<210> 1693
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1693
 acgcgtgttc catctgcagc cgtgcgaaaa ctctcccacc atgtcgcaga ctggatactt
 60
 cgaggattca agctactaca agtgtgacac agatgacacc ttcgaagccc gagaggagat
 120
 actggggggg atgaggcctt cgacactgcc aactcctcca tcgtgtctgg cgagagtatc
 180
 cgtttttttg tcaatgtcaa ccttgagatg caggccacca aactgagaa tgaagcgact
 240
 tccggtggct gtgtgctcct gcacacctcc cgaaaggcca gcatcgtcct gaacgagacg
 300
 gccacctccc tggataacgt gctgcggacc atg
 333

<210> 1694
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1694

```

Met Val Arg Ser Thr Leu Ser Arg Glu Val Ala Val Ser Phe Arg Thr
 1           5           10           15
Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
          20           25           30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
          35           40           45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
          50           55           60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
65           70           75           80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
          85           90           95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
          100           105           110

```

<210> 1695

<211> 485

<212> DNA

<213> Homo sapiens

<400> 1695

```

tgatcagctt tatcaggagt ttttgcaagt accgcagatt tatgttgaat cctagtaagc
60
gccaggaatt tgaagactat cttcaccagg aaatgcaaaa tagcaaggaa aatttcacca
120
cagcacacaa cacatcggga cgttcagctc caccctccac aaatgtccgg agtgcagacc
180
aagagaatgg agaaataacc cttgtaaagc gtcgtatatt tggccacagg attatcactg
240
tcaactttgc gatcaatgat ctatatttct tttctgaaat ggagaaaattt aatgatctgg
300
tcagttcagc ccacatgctg caggtcaacc gggcatataa tgagaatgat gtgatoctaa
360
tgcggtccaa aatgaacatt atccaaaaac tcttctgaa ttctgacatc cctccaaagc
420
tgagggtgaa tgtccctgag ttccagaagg atgccatcct tgctgccatc acagagggct
480
accta
485

```

<210> 1696

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1696

```

Met Leu Asn Pro Ser Lys Arg Gln Glu Phe Glu Asp Tyr Leu His Gln
 1           5           10           15
Glu Met Gln Asn Ser Lys Glu Asn Phe Thr Thr Ala His Asn Thr Ser
          20           25           30
Gly Arg Ser Ala Pro Pro Ser Thr Asn Val Arg Ser Ala Asp Gln Glu
          35           40           45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

```



```

      50              55              60
Ile Thr Val Asn Phe Ala Ile Asn Asp Leu Tyr Phe Phe Ser Glu Met
65              70              75              80
Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      85              90              95
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      100             105             110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
      115             120             125
Val Asn Val Pro Glu Phe Gln Lys Asp Ala Ile Leu Ala Ala Ile Thr
      130             135             140
Glu Gly Tyr Leu
145

```

<210> 1697
 <211> 337
 <212> DNA
 <213> Homo sapiens

```

<400> 1697
accaggttcc caccatcctc aggggaatca cagggttactg gctttggaga ccgagatgtc
60
ttcccgcctc ccaggggcct gtggatggga ctccctgcga attcgactcc caggggaaaa
120
gccaaagagct gcctccttgg gacaaactggg gcggcagctg tgatcgaca tggcttcagc
180
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      35      40      45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50      55      60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
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<400> 1701

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Leu	Phe	Leu	Ser	Asp	Asp	Asp	Pro	Lys	Lys	Gly	Ile	Trp	Leu	Glu	Ala
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Pro	Val	Gln	Leu	Asn	Leu	Leu	Tyr	Val	Gln	Ala	Arg	Asp	Asp	Ile	Leu
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Val	Lys	Ala	His	Ala	Thr	Gly	Ala	Gly	Pro	Ala	Gly	Arg	Tyr	Asp	Gln		
		785				790				795					800		
Ala	Thr	Asp	Thr	Ile	Leu	Thr	Val	Thr	Glu	Asn	Ile	Phe	Ser	Ser	Met		
				805					810					815			
Gly	Asp	Ala	Gly	Glu	Met	Val	Arg	Gln	Ala	Arg	Ile	Leu	Ala	Gln	Ala		
			820					825					830				
Thr	Ser	Asp	Leu	Val	Asn	Ala	Ile	Lys	Ala	Asp	Ala	Glu	Gly	Glu	Ser		
		835					840					845					
Asp	Leu	Glu	Asn	Ser	Arg	Lys	Leu	Leu	Ser	Ala	Ala	Lys	Ile	Leu	Ala		
		850				855					860						
Asp	Ala	Thr	Ala	Lys	Met	Val	Glu	Ala	Ala	Lys	Gly	Ala	Ala	Ala	His		
		865			870					875					880		
Pro	Asp	Ser	Glu	Glu	Gln	Gln	Gln	Arg	Leu	Arg	Glu	Ala	Ala	Glu	Gly		
				885					890					895			
Leu	Arg	Met	Ala	Thr	Asn	Ala	Ala	Ala	Gln	Asn	Ala	Ile	Lys	Lys	Lys		
			900					905					910				
Leu	Val	Gln	Arg	Leu	Glu	His	Ala	Ala	Lys	Gln	Ala	Ala	Ala	Ser	Ala		
		915					920				925						
Thr	Gln	Thr	Ile	Ala	Ala	Ala	Gln	His	Ala	Ala	Ser	Ala	Pro	Lys	Ala		
		930				935					940						
Ser	Ala	Gly	Pro	Gln	Pro	Leu	Leu	Val	Gln	Ser	Cys	Lys	Ala	Val	Ala		
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Glu	Gln	Ile	Pro	Leu	Leu	Val	Gln	Gly	Val	Arg	Gly	Ser	Gln	Ala	Gln		
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Pro	Asp	Ser	Pro	Ser	Ala	Gln	Leu	Ala	Leu	Ile	Ala	Ala	Ser	Gln	Ser		
			980					985					990				
Phe	Leu	Gln	Pro	Gly	Gly	Lys	Met	Val	Ala	Ala	Ala	Lys	Ala	Ser	Val		
		995					1000					1005					
Pro	Thr	Ile	Gln	Asp	Gln	Ala	Ser	Ala	Met	Gln	Leu	Ser	Gln	Cys	Ala		
		1010				1015					1020						
Lys	Asn	Leu	Gly	Thr	Ala	Leu	Ala	Glu	Leu	Arg	Thr	Ala	Ala	Gln	Lys		
					1030					1035					1040		
Ala	Gln	Glu	Ala	Cys	Gly	Pro	Leu	Glu	Met	Asp	Ser	Ala	Leu	Ser	Val		
				1045					1050					1055			
Val	Gln	Asn	Leu	Glu	Lys	Asp	Leu	Gln	Glu	Val	Lys	Ala	Ala	Ala	Arg		
			1060					1065					1070				
Asp	Gly	Lys	Leu	Lys	Pro	Leu	Pro	Gly	Glu	Thr	Met	Glu	Lys	Cys	Thr		
		1075															

1170	1175	1180
Leu Ala Gln Val Ala Lys	Ala Val Thr Gln Ala	Leu Asn Arg Cys Val
1185	1190	1195
Ser Cys Leu Pro Gly Gln	Arg Asp Val Asp Asn	Ala Leu Arg Ala Val
1205	1210	1215
Gly Asp Ala Ser Lys Arg	Leu Leu Ser Asp Ser	Leu Pro Pro Ser Thr
1220	1225	1230
Gly Thr Phe Gln Glu Ala	Gln Ser Arg Leu Asn	Glu Ala Ala Ala Gly
1235	1240	1245
Leu Asn Gln Ala Ala Thr	Glu Leu Val Gln Ala	Ser Arg Gly Thr Pro
1250	1255	1260
Gln Asp Leu Ala Arg Ala	Ser Gly Arg Phe Gly	Gln Asp Phe Ser Thr
1265	1270	1275
Phe Leu Glu Ala Gly Val	Glu Met Ala Gly Gln	Ala Pro Ser Gln Glu
1285	1290	1295
Asp Arg Ala Gln Val Val	Ser Asn Leu Lys Gly	Ile Ser Met Ser Ser
1300	1305	1310
Ser Lys Leu Leu Leu Ala	Ala Lys Ala Leu Ser	Thr Asp Pro Ala Ala
1315	1320	1325
Pro Asn Leu Lys Ser Gln	Leu Ala Ala Ala Ala	Arg Ala Val Thr Asp
1330	1335	1340
Ser Ile Asn Gln Leu Ile	Thr Met Cys Thr Gln	Gln Ala Pro Gly Gln
1345	1350	1355
Lys Glu Cys Asp Asn Ala	Leu Arg Glu Leu Glu	Thr Val Arg Glu Leu
1365	1370	1375
Leu Glu Asn Pro Val Gln	Pro Ile Asn Asp Met	Ser Tyr Phe Gly Cys
1380	1385	1390
Leu Asp Ser Val Met Glu	Asn Ser Lys Val Leu	Gly Glu Ala Met Thr
1395	1400	1405
Gly Ile Ser Gln Asn Ala	Lys Asn Gly Asn Leu	Pro Glu Phe Gly Asp
1410	1415	1420
Ala Ile Ser Thr Ala Ser	Lys Ala Leu Cys Gly	Phe Thr Glu Ala Ala
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Ala Gln Ala Ala Tyr Leu	Val Gly Val Ser Asp	Pro Asn Ser Gln Ala
1445	1450	1455
Gly Gln Gln Gly Leu Val	Glu Pro Thr Gln Phe	Ala Arg Ala Asn Gln
1460	1465	1470
Ala Ile Gln Met Ala Cys	Gln Ser Leu Gly Glu	Pro Gly Cys Thr Gln
1475	1480	1485
Ala Gln Val Leu Ser Ala	Ala Thr Ile Val Ala	Lys His Thr Ser Ala
1490	1495	1500
Leu Cys Asn Ser Cys Arg	Leu Ala Ser Ala Arg	Thr Thr Asn Pro Thr
1505	1510	1515
Ala Lys Arg Gln Phe Val	Gln Ser Ala Lys Glu	Val Ala Asn Ser Thr
1525	1530	1535
Ala Asn Leu Val Lys Thr	Ile Lys Ala Leu Asp	Gly Ala Phe Thr Glu
1540	1545	1550
Glu Asn Arg Ala Gln Cys	Arg Ala Ala Thr Ala	Pro Leu Leu Glu Ala
1555	1560	1565
Val Asp Asn Leu Ser Ala	Phe Ala Ser Asn Pro	Glu Phe Ser Ser Ile
1570	1575	1580
Pro Ala Gln Ile Ser Pro	Glu Gly Arg Ala Ala	Met Glu Pro Ile Val
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Ile Ser Ala Lys Thr Met	Leu Glu Ser Ala Gly	Gly Gly Leu Ile Gln Thr

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Ala	Arg	Ala	Leu	Ala	Val	Asn	Pro	Arg	Asp	Pro	Pro	Ser	Trp	Ser	Val				
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Leu	Ala	Gly	His	Ser	Arg	Thr	Val	Ser	Asp	Ser	Ile	Lys	Lys	Leu	Ile				
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Thr	Ser	Met	Arg	Asp	Lys	Ala	Pro	Gly	Gln	Leu	Glu	Cys	Glu	Thr	Ala				
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His	Lys	Val	Ser	Gln	Met	Ala	Gln	Tyr	Phe	Glu	Pro	Leu	Thr	Leu	Ala				
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Tyr	Thr	Ala	Lys	Glu	Ala	Gly	Gly	Asn	Pro	Lys	Gln	Ala	Ala	His	Thr				
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Gln	Glu	Ala	Leu	Glu	Glu	Ala	Val	Gln	Met	Met	Thr	Glu	Ala	Val	Glu				
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Gly	Pro	Met	Gly	Glu	Pro	Glu	Gly	Ser	Phe	Val	Asp	Tyr	Gln	Thr	Thr				
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Met	Val	Arg	Thr	Ala	Lys	Ala	Ile	Ala	Val	Thr	Val	Gln	Glu	Met	Val				
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Leu	Thr	Ser	Asp	Tyr	Gly	Arg	Leu	Ala	Ser	Glu	Ala	Lys	Pro	Ala	Ala				
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Val	Ala	Ala	Glu	Asn	Glu	Glu	Ile	Gly	Ser	His	Ile	Lys	His	Arg	Val				
1905											1910			1915			1920		
Gln	Glu	Leu	Gly	His	Gly	Cys	Ala	Ala	Leu	Val	Thr	Lys	Ala	Gly	Ala				
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Cys	Ala	Arg	Arg	Val	Ser	Glu	Lys	Val	Ser	His	Val	Leu	Ala	Ala	Leu				
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Ala	Gly	Thr	Leu	Asn	Arg	Glu	Gly	Thr	Glu	Thr	Ser	Ala	Asp	His	Arg				
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2035				2040				2045							
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2050				2055				2060							
Gly	Ala	Ala	Ser	Leu	Gly	Ala	Glu	Asp	Pro	Glu	Thr	Gln	Val	Val	Leu
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Ile	Asn	Ala	Val	Lys	Asp	Val	Ala	Lys	Ala	Leu	Gly	Asp	Leu	Ile	Ser
				2085				2090				2095			
Ala	Thr	Lys	Ala	Ala	Ala	Gly	Lys	Val	Gly	Asp	Asp	Pro	Ala	Val	Trp
				2100				2105				2110			
Gln	Leu	Lys	Asn	Ser	Ala	Lys	Val	Met	Val	Thr	Asn	Val	Thr	Ser	Leu
				2115				2120				2125			
Leu	Lys	Thr	Val	Lys	Ala	Val	Glu	Asp	Glu	Ala	Thr	Lys	Gly	Thr	Arg
				2130				2135				2140			
Ala	Leu	Glu	Ala	Thr	Thr	Glu	His	Ile	Arg	Gln	Glu	Leu	Ala	Val	Phe
2145				2150				2155				2160			
Cys	Ser	Pro	Glu	Pro	Pro	Ala	Lys	Thr	Ser	Thr	Pro	Glu	Asp	Phe	Ile
				2165				2170				2175			
Arg	Met	Thr	Lys	Gly	Ile	Thr	Met	Ala	Thr	Ala	Lys	Ala	Val	Ala	Ala
				2180				2185				2190			
Gly	Asn	Ser	Cys	Arg	Gln	Glu	Asp	Val	Ile	Ala	Thr	Ala	Asn	Leu	Ser
				2195				2200				2205			
Arg	Arg	Ala	Ile	Ala	Asp	Met	Leu	Arg	Ala	Cys	Lys	Glu	Ala	Ala	Tyr
				2210				2215				2220			
His	Pro	Glu	Val	Ala	Pro	Asp	Val	Arg	Leu	Arg	Ala	Leu	His	Tyr	Gly
2225				2230				2235				2240			
Arg	Glu	Cys	Ala	Asn	Gly	Tyr	Leu	Glu	Leu	Leu	Asp	His	Val	Leu	Leu
				2245				2250				2255			
Thr	Leu	Gln	Lys	Pro	Ser	Pro	Glu	Leu	Lys	Gln	Gln	Leu	Thr	Gly	His
				2260				2265				2270			
Ser	Lys	Arg	Val	Ala	Gly	Ser	Val	Thr	Glu	Leu	Ile	Gln	Ala	Ala	Glu
				2275				2280				2285			
Ala	Met	Lys	Gly	Thr	Glu	Trp	Val	Asp	Pro	Glu	Asp	Pro	Thr	Val	Ile
				2290				2295				2300			
Ala	Glu	Asn	Glu	Leu	Leu	Gly	Ala	Ala	Ala	Ala	Ile	Glu	Ala	Ala	Ala
2305				2310				2315				2320			
Lys	Lys	Leu	Glu	Gln	Leu	Lys	Pro	Arg	Ala	Lys	Pro	Lys	Glu	Ala	Asp
				2325				2330				2335			
Glu	Ser	Leu	Asn	Phe	Glu	Glu	Gln	Ile	Leu	Glu	Ala	Ala	Lys	Ser	Ile
				2340				2345				2350			
Ala	Ala	Ala	Thr	Ser	Ala	Leu	Val	Lys	Ala	Ala	Ser	Ala	Ala	Gln	Arg
				2355				2360				2365			
Glu	Leu	Val	Ala	Gln	Gly	Lys	Val	Gly	Ala	Ile	Pro	Ala	Asn	Ala	Leu
				2370				2375				2380			
Asp	Asp	Gly	Gln	Trp	Ser	Gln	Gly	Leu	Ile	Ser	Ala	Ala	Arg	Met	Val
2385				2390				2395				2400			
Ala	Ala	Ala	Thr	Asn	Asn	Leu	Cys	Glu	Ala	Ala	Asn	Ala	Ala	Val	Gln
				2405				2410				2415			
Gly	His	Ala	Ser	Gln	Glu	Lys	Leu	Ile	Ser	Ser	Ala	Lys	Gln	Val	Ala
				2420				2425				2430			
Ala	Ser	Thr	Ala	Gln	Leu	Leu	Val	Ala	Cys	Lys	Val	Lys	Ala	Asp	Gln
				2435				2440				2445			
Asp	Ser	Glu	Ala	Met	Lys	Arg	Leu	Gln	Ala	Ala	Gly	Asn	Ala	Val	Lys
				2450				2455				2460			
Arg	Ala	Ser	Asp	Asn	Leu	Val	Lys	Ala	Ala	Gln	Lys	Ala	Ala	Ala	Phe

2465 2470 2475 2480
 Glu Glu Gln Glu Asn Glu Thr Val Val Val Lys Glu Lys Met Val Gly
 2485 2490 2495
 Gly Ile Ala Gln Ile Ile Ala Ala Gln Glu Glu Met Leu Arg Lys Glu
 2500 2505 2510
 Arg Glu Leu Glu Glu Ala Arg Lys Lys Leu Ala Gln Ile Arg Gln Gln
 2515 2520 2525
 Gln Tyr Lys Phe Leu Pro Ser Glu Leu Arg Asp Glu His
 2530 2535 2540

<210> 1703
 <211> 346
 <212> DNA
 <213> Homo sapiens

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 120
 tctgctctac ccttctccat gactgctgcc tggctctgtcc tagccttgct ctgatccaca
 180
 ctgagctggc cttgagcagg gtcgcacctg tacatgaaga caatggctgg tttctcactg
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 gactctcctt tcgcctctgt gaaccagtga tggcgctgaa ctggaggaag aggcagcatg
 300
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 346

<210> 1704
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1704
 Met Asp Gly Thr Val Ile His Met Leu Pro Leu Pro Pro Val Gln Arg
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 His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala
 20 25 30
 Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val
 35 40 45
 Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly
 50 55 60
 Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His
 65 70 75 80
 Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His
 85 90 95
 Glu Val Thr Glu Asp Phe Ser Pro Arg Asp
 100 105

<210> 1705
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 1705

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120
ctggtgctcc aatcgagttg cagaaaggta tacagggtgg agcaagttta tttaatcctg
180
gttttggtg gaacaaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctattc
240
ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag
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cttttaactc tgcccctgca ccacagatgg aatttccac agttcctcca tacaaccct
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377

<210> 1706

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1706

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Asn	Phe	Pro	Glu	Gly	Leu	Ala	Ser	Thr	Gly	Ala	Pro	Ile	Glu	Leu	Gln
		20						25					30		
Lys	Gly	Ile	Gln	Gly	Gly	Ala	Ser	Leu	Phe	Asn	Pro	Gly	Phe	Gly	Trp
		35					40					45			
Asn	Gln	Asn	Pro	Gln	Val	Gln	Thr	Leu	Lys	Asn	Ser	Gln	Gly	Ser	Ile
	50					55					60				
His	Asn	Leu	Val	Arg	Ser	Gly	Val	Thr	Val	Glu	Arg	Lys	Val	Asn	Val
65					70					75				80	
Gly	Ala	Gln	Gly	Ala	Phe	Asn	Ser	Ala	Pro	Ala	Pro	Gln	Met	Glu	Phe
			85					90					95		
Pro	Thr	Val	Pro	Pro	Tyr	Asn	Pro	Ser	Ser	Phe	Gly	Ala	Ser		
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<210> 1707

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1707

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120
gttctcagcg aacgcgcaca cgaacctctc atcgtcgagg ccagcgacca cattggcgga
180
gtcatccttg cgggtgggtca accttccttc aaggaggacg acctagctct gctggagtgg
240
taccgcacca ccttggagga gttgggcgtg gagattcgac tcaacaccac cgtaacggct
300

gatcttatcg cttccttcgg ggccgatcac gtcgtcctgg cgaccggatc gaggccgcgt
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 427

<210> 1708

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1708

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		20					25						30		
Leu	Ala	Gly	Met	Glu	Ala	Ala	Arg	Val	Leu	Ser	Glu	Arg	Ala	His	Glu
		35					40						45		
Pro	Leu	Ile	Val	Glu	Ala	Ser	Asp	His	Ile	Gly	Gly	Val	Ile	Leu	Ala
	50					55					60				
Gly	Gly	Gln	Pro	Ser	Phe	Lys	Glu	Asp	Asp	Leu	Ala	Leu	Leu	Glu	Trp
65				70					75					80	
Tyr	Arg	Thr	Thr	Leu	Glu	Glu	Leu	Gly	Val	Glu	Ile	Arg	Leu	Asn	Thr
			85						90					95	
Thr	Val	Thr	Ala	Asp	Leu	Ile	Ala	Ser	Phe	Gly	Ala	Asp	His	Val	Val
			100					105					110		
Leu	Ala	Thr	Gly	Ser	Arg	Pro	Arg	Arg	Leu	Asp	Leu	Gly	Asp	Asp	Ala
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Lys	Val	Ile	Asp	Ala	Thr	Asp	Ala	Leu	Leu	Asn	Arg	Asp	Ala		
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<210> 1709

<211> 446

<212> DNA

<213> Homo sapiens

<400> 1709

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 120
 ctctctttcc agccacatca tatctcagcc tcttgaggga aactcccata gcttgtctct
 180
 tcagtcccag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac
 240
 caggttggtg caagaggtct tctttcaggc aatcctgctt gctgtgtgct taatcatttc
 300
 tgcattgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gctcattgat
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 gataactgta gcttatgtga aatcattggt tctcagcctt gccagctatt tcaaaaccac
 420
 tgcctgtgct cggtttgtca aaattt
 446

<210> 1710
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 1710
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 Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
 35 40 45
 Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
 50 55 60
 Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala
 65 70 75 80
 Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
 85 90 95
 Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg
 100 105 110
 Phe Val Lys Ile
 115

<210> 1711
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1711
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 120
 cctcaataca attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc
 180
 agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaataccca
 240
 ccccatgcac tgcccagtc ccagacccca aagactttgt cctcgccctca cgcacctttt
 300
 gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct
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 420
 ggatat
 426

<210> 1712
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1712
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Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
      35           40           45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50           55           60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65           70           75           80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85           90           95
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Glu Gly Pro Gln Asp Gly Tyr
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<210> 1713

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1713

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ccagaattgg ccttggctgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggatcatgat aggtcagctt tggaggagca gggccagcgt gtctgtcttt ctgtcctctg
180
aatgagcctc actccctccc tgctcaaggc agcccttcac ccagccgccc ggacaggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
300
aacgcatctg gctggtgact cctggggg
328

```

<210> 1714

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1714

```

Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
  1           5           10           15
Leu Ala Leu Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20           25           30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35           40           45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50           55           60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65           70           75           80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85           90           95
Ser Gly Trp

```


<210> 1715
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 1715
 gttgccagcg atgggcccga tttgtacatc ccggtatttc gtgttcgggtg tgggtgtaaaa
 60
 gatgccccat gtgtgacatt ctgtggatag ttattgttag cattatttga caagttctag
 120
 aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag
 180
 ttgatcatgg cctgtcatgg cgtagctctc tacgtcgtaa agtatgagac aatccacggg
 240
 aatatgggtgt tttttggcca actcgggaagc cgggggtgtcg ggggaagtcgg tccctgtaag
 300
 gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagttcgt ccaagggttcg
 360
 aactcattac cgtcgaatac gacgctgtcg ccacggcggg tgtcgaatcg aatcctcaaa
 420
 gtgtatccgt actcgggtgc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca
 480
 ctgacgcgt
 489

<210> 1716
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1716
 Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile
 1 5 10 15
 His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly
 20 25 30
 Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys
 35 40 45
 Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn
 50 55 60
 Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr
 65 70 75 80
 Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly
 85 90 95
 Cys Ala Leu Thr Arg
 100

<210> 1717
 <211> 312
 <212> DNA
 <213> Homo sapiens

<400> 1717

nggcatacaa cggagtaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga
 60
 gaggtttctg gtttcaagaa ggcacactga gtccctgcac ccgatgcctc tccttcccca
 120
 aatcccactg gaatacacag agagacataa aaacaaggag tgtcctgtag cagagcagcc
 180
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgcgg
 240
 atcagccaac agatccatgg aaagcaaagg gcccttctcc ggaggcttcc tggggcctgc
 300
 catgaatgtg tc
 312

<210> 1718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1718

Met	Ala	Gly	Pro	Arg	Lys	Pro	Pro	Glu	Lys	Gly	Pro	Leu	Leu	Ser	Met
1				5					10					15	
Asp	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Gln	Glu	Pro	Cys	Leu	Pro	Glu	Asp
			20					25					30		
Cys	Ser	Leu	Cys	Leu	Met	Ser	Gln	Pro	Gly	Cys	Ser	Ala	Thr	Gly	His
			35				40					45			
Ser	Leu	Phe	Leu	Cys	Leu	Ser	Val	Tyr	Ser	Ser	Gly	Ile	Trp	Gly	Arg
			50			55					60				
Arg	Gly	Ile	Gly	Cys	Arg	Asp	Ser	Val	Cys	Leu	Leu	Glu	Thr	Arg	Asn
65					70				75					80	
Leu	Ser	Arg	Ser	Leu	Gly	Leu	Phe	Pro	Leu	Leu	Leu	Met	Trp	Phe	Leu
				85				90						95	
Leu	Arg	Cys	Met	Pro											
				100											

<210> 1719

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1719

tgatcaccac ggccctgcca ttttttgtcg ggaccgcaga ccgatgctg cccctcgaag
 60
 tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggt
 120
 ccaacagttt ctccaacctc ataggtagaa gaagtgtat agctgctgga aatggagatg
 180
 tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagtt cttcgtctta
 240
 gtttctgtga tggatcgcgt gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt
 300
 cccagcagag ccacgaagt agctgcgcac cacatgaacg ggctgtccgt gtcacccgga
 360
 ttcgagcagg gagcaccat tggtngtgg tgtccccggg gggt
 404

<210> 1720
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1720
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met
 1 5 10 15
 Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln
 20 25 30
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys
 35 40 45
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp
 50 55 60
 Val Ile His Ile Ser Ile Ser Ser Tyr Ser Thr Ser Ser Thr Tyr
 65 70 75 80
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr
 85 90 95
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His
 100 105 110
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp
 115 120 125

<210> 1721
 <211> 529
 <212> DNA
 <213> Homo sapiens

<400> 1721
 ccatggccac cctttcagga cagagctgcc ctccccatgc tggaggagcc acagggcctg
 60
 gtcgctgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcactt gtaatgtcca
 120
 ggcactccct gcttggatca ggggatctgg gtttcatctt cccagctcct cctgtcctct
 180
 gctgggcacc tgtgatgtcc aggcactccc tgcttggatt gggggatctg ggtttcatct
 240
 tcccagctcc tctgtcctc cgctgggcac ctgtgatgtc caggcactcc ctgcttggat
 300
 cggggggtct gggttttgtg ctatacttgg tgtcccttt cactcaggcc ccttcttgac
 360
 tctgcagagc taccctcgc catctctttc acgcgggcct cctgcagtct ctgtgtcac
 420
 cctgtgactc tgcttccggt gttgtcaaat gggggtcac ccaggaccg caccactggg
 480
 tcgtgtgcag gtttctgggg tggcagagtg cggatgagtg ggcacgcgt
 529

<210> 1722
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1722

```

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1           5           10           15
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
          20           25           30
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
          35           40           45
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
          50           55           60
Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
65           70           75           80
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
          85           90           95
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
          100          105          110
Phe Thr Gln Ala Phe Ser
          115

```

<210> 1723

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1723

```

acgcgtttga agctggatgc atggatatcc agcgccgcca tcgggtcaaa tgggttgacg
60
ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cgttgatgtc gacgctcgcc
120
ggtttggcct ggcggctgtc aatggtgcca atcttcccg ttagttgttg aatggcagt
180
gcaaagttag gcgtgaggct gaagtcggcg aagttggccg agccatcatt gatcgcaacc
240
tgcccaatgt gaatgccagc tggcttctct ttgctggccg ccggctgtct tgttgccagt
300
gtcggccggg tgcgggatca gcaagtcac gatgttggtg gggcggtcat cggatgatcg
360
tgcattcaat a
371

```

<210> 1724

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1724

```

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1           5           10           15
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
          20           25           30
Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
          35           40           45
Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
          50           55           60
Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

```


65		70		75		80									
Trp	Leu	Leu	Phe	Ala	Gly	Arg	Arg	Leu	Ser	Cys	Cys	Gln	Cys	Arg	Pro
			85					90						95	
Gly	Ala	Gly	Ser	Ala	Ser	His	Arg	Cys	Trp	Trp	Gly	Gly	His	Arg	
		100						105						110	

<210> 1725

<211> 807

<212> DNA

<213> Homo sapiens

<400> 1725

```

ngtgacctg gtatggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg
60
atttgaagtg acctcttccc tctgagcctt ctggtgtcca actctccccct tctctaggac
120
catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg
180
gagctggagg agacttcaga ggagacaggg cattggcaga gtatgttcca gaagaacaag
240
gaggatctta gagccaccaa gcaggaactc ctgcagctgc gaatggagaa ggaggagatg
300
gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca ggccccagct
360
agtgtggag atactcgcca ggttgaggtg ctcaagaagg agctgctccg gacacaggag
420
gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggcg acaccgggac
480
cgggagttgg agaagcagct ggcggtcctg agggctcgagg ctgatcgagg tcgggagctg
540
gaagaacaga acctccagct acaaaagacc ctccagcaat tgcgacagga ctgtgaagag
600
gcttccaagg ctaagatggt ggccgaggca gaggcaacag tgctggggca gcggcgggcc
660
gcagtggaga cgacgcttcg ggagaccag gaggaaaatg acgaattccg ccggcgcatc
720
ctggggtttg agcagcagct gaaggagact cgaggtctgg tggatggtgg ggaagcgggtg
780
gaggcacgac tacgggacaa gctgcag
807

```

<210> 1726

<211> 230

<212> PRT

<213> Homo sapiens

<400> 1726

Asp	His	Ala	Val	Leu	Glu	Ala	Glu	Arg	Gln	Lys	Met	Ser	Ala	Leu	Val
1				5					10					15	
Arg	Gly	Leu	Gln	Arg	Glu	Leu	Glu	Glu	Thr	Ser	Glu	Glu	Thr	Gly	His
			20					25					30		
Trp	Gln	Ser	Met	Phe	Gln	Lys	Asn	Lys	Glu	Asp	Leu	Arg	Ala	Thr	Lys
		35					40				45				
Gln	Glu	Leu	Leu	Gln	Leu	Arg	Met	Glu	Lys	Glu	Glu	Met	Glu	Glu	Glu

50	55	60
Leu Gly Glu Lys Ile	Glu Val Leu Gln Arg	Glu Leu Glu Gln Ala Arg
65	70	75
Ala Ser Ala Gly Asp Thr Arg	Gln Val Glu Val Leu Lys Lys	Glu Leu
85	90	95
Leu Arg Thr Gln Glu Glu Leu Lys	Glu Leu Gln Ala Glu Arg	Gln Ser
100	105	110
Gln Glu Val Ala Gly Arg His Arg	Asp Arg Glu Leu Glu Lys	Gln Leu
115	120	125
Ala Val Leu Arg Val Glu Ala Asp	Arg Gly Arg Glu Leu Glu Glu Gln	
130	135	140
Asn Leu Gln Leu Gln Lys Thr Leu	Gln Gln Leu Arg Gln Asp Cys Glu	
145	150	155
Glu Ala Ser Lys Ala Lys Met Val	Ala Glu Ala Thr Val Leu	
165	170	175
Gly Gln Arg Arg Ala Ala Val Glu	Thr Thr Leu Arg Glu Thr Gln Glu	
180	185	190
Glu Asn Asp Glu Phe Arg Arg Arg	Ile Leu Gly Leu Glu Gln Gln Leu	
195	200	205
Lys Glu Thr Arg Gly Leu Val Asp	Gly Gly Glu Ala Val Glu Ala Arg	
210	215	220
Leu Arg Asp Lys Leu Gln		
225	230	

<210> 1727
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 1727
 aaccaactct ccacaacatc gccagaaaca gtcgctgcc aagggtcca ccatgtttta
 60
 gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aagggacatt
 120
 atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag tacccaacaa
 180
 acacaacaga agaagtattt ggagcagttg cacttgcccc aaagcaaacc aatttcccca
 240
 aatttcaaag ttaaaaccat caaacttcca actctagatc atacattaaa tgaaacagac
 300
 cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaacctt taccaaaaaa
 360
 caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
 420
 gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
 474

<210> 1728
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1728
 Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys


```

      1           5           10           15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
      20           25           30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
      35           40           45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
      50           55           60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
      65           70           75           80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
      85           90           95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
      100          105          110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
      115          120          125
Gln Leu
      130

```

<210> 1729

<211> 470

<212> DNA

<213> Homo sapiens

<400> 1729

```

acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
60
aggatcgacg tgtggctgtg gtcggtgcgc gtctataagt cccggtcggt ggctaccgcc
120
gccgtcaagg gcggccacat tcgcctcaat ggagaccggg ttaaaccctc ccacgacgtg
180
aaaccggcg ataccgtcac catccacacc cccggatggg accgggtcct caaggtcatc
240
aaccgatca cgaagagat cggcgcaaaa ctgcggtcg aggcttacga agatctgtca
300
nngcccccg acccgcttac ctctctgnct cccctcgccc gccgcgaccg tggggctgga
360
cgaccaccca agaaggatcg tcgcgagatc gatcggtccc gaggcggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggtcgcgg ccgaattggc
470

```

<210> 1730

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1730

```

His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
      1           5           10           15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
      20           25           30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
      35           40           45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```



```

      50              55              60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
65              70              75              80
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
      85              90              95
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
      100             105             110
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
      115             120             125
Ser Arg Tyr
      130

```

<210> 1731

<211> 534

<212> DNA

<213> Homo sapiens

<400> 1731

```

agcgctccct gcctgctgct gggcggaggg aaggcggcaa gagctgcgga gcccttggaa
60
gagcttccag gaaccttgcg ctgtgggata aaggaatgag gttcagaaag gggcagggag
120
ttgccgcgag ccgcaccgca cgtcttcagc ccgaccgttg tcttgacctc tctgtcccg
180
cccctgccca gtctcaccat ggccttcttg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccggtccag ctcttggtcg aattgctgtg gcctctcttc
300
ctcttcttca tcttggtggc tgttggccac tcccaccgc ccctggagca ccatgaatgc
360
cacttcccaa acaagccact gccatcggcg ggcaccgtgc cctggctcca ggggtctcatc
420
tgtaatgtga acaacacctg ctttccgcag ctgacaccgg gcgaggagcc cgggcgcctg
480
agcaacttca acgactccct ggtctcccg ctgctacgtc ggagagaggc tgga
534

```

<210> 1732

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1732

```

Met Ala Phe Trp Thr Gln Leu Met Leu Leu Trp Lys Asn Phe Met
1              5              10              15
Tyr Arg Arg Arg Gln Pro Val Gln Leu Val Glu Leu Leu Trp Pro
      20              25              30
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
      35              40              45
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
      50              55              60
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
65              70              75              80
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

```


	85		90		95										
Phe	Asn	Asp	Ser	Leu	Val	Ser	Arg	Leu	Leu	Arg	Arg	Arg	Glu	Ala	Gly
	100							105					110		

<210> 1733

<211> 409

<212> DNA

<213> Homo sapiens

<400> 1733

```

acgcgtgatg gccgatccga ctgtgcccg tcacgaccg cggcgtccga gtcctgaccc
60
ggacatgccg tggctgatcc gcgacatcac cctcggcaac aacgtgatcg cgggcagcac
120
gggcaactgc accctctgcg tcgaggacta ctcgcgaggg tacgcggcga ggatcctcaa
180
catcgtctcc gacggcaacg tcctgcagcg cgcacgccc gcacagccag cgtggctggg
240
tgggtgtggc gcggggatca gcgaactccg atccgtacgt attctccagc ctcgacgctt
300
accgggcgac cactggtttt taggaccttc gtcgggtctc gatcgatggc gtgctgtcac
360
cgcgcccgga gcgctgctcc cgggcattga tctcaaggcg gtcacgagg
409

```

<210> 1734

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1734

Met	Ala	Asp	Pro	Thr	Val	Pro	Gly	His	Asp	Pro	Arg	Arg	Pro	Ser	Pro
1				5				10					15		
Asp	Pro	Asp	Met	Pro	Trp	Leu	Ile	Arg	Asp	Ile	Thr	Leu	Gly	Asn	Asn
		20						25					30		
Val	Ile	Ala	Gly	Ser	Thr	Gly	Asn	Cys	Thr	Leu	Cys	Val	Glu	Asp	Tyr
		35					40					45			
Ser	Arg	Arg	Tyr	Ala	Ala	Arg	Ile	Leu	Asn	Ile	Val	Ser	Asp	Gly	Asn
	50					55					60				
Val	Leu	Gln	Arg	Ala	Ser	Ala	Ala	Gln	Pro	Ala	Trp	Leu	Val	Gly	Val
65					70					75				80	
Val	Ala	Gly	Ile	Ser	Glu	Leu	Arg	Ser	Val	Arg	Ile	Leu	Gln	Pro	Arg
				85					90				95		
Arg	Leu	Pro	Gly	Asp	His	Trp	Phe	Leu	Gly	Pro	Ser	Leu	Gly	Leu	Asp
		100					105					110			
Arg	Trp	Arg	Ala	Val	Thr	Ala	Ala	Gly	Ala	Leu	Leu	Pro	Gly	Ile	Asp
		115					120					125			
Leu	Lys	Ala	Val	Thr	Arg										
	130														

<210> 1735

<211> 342

<212> DNA

<213> Homo sapiens

<400> 1735

ggcgccatgg tcatcagcat catgtgttcg gcgcccgctg cacgaatgtt cgtgcgatca
60
agcgcgcctt ttagttcgac gcacggtaaa gcccgtcgc atcgatgtag gccaggaccg
120
cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg
180
cggacaccgc aagcgggggtc tgccagacga atgcaatatt cccgttcggc cgggtcaggg
240
ccaaggggtc acttaccgac cgcgcggcca gcaggttgcg caaggcatcc ggcggttcgc
300
tggcggcatc cgggcgttgc aaaaccagga tgtggcaatg ct
342

<210> 1736

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1736

Met	Val	Ile	Ser	Ile	Met	Cys	Ser	Ala	Pro	Ala	Ala	Arg	Met	Phe	Val
1				5					10					15	
Arg	Ser	Ser	Ala	Pro	Phe	Ser	Ser	Thr	His	Gly	Lys	Ala	Arg	Ala	His
			20					25					30		
Arg	Cys	Arg	Pro	Gly	Pro	Arg	Gln	Ala	Pro	Gly	Asn	Val	Pro	Thr	Ser
			35				40					45			
Arg	Trp	Pro	Ala	Val	Asp	Gly	Ser	Gly	Trp	Arg	Thr	Pro	Gln	Ala	Gly
			50			55					60				
Ser	Ala	Arg	Arg	Met	Gln	Tyr	Ser	Arg	Ser	Ala	Arg	Ser	Gly	Pro	Arg
65					70					75				80	
Gly	His	Leu	Pro	Thr	Ala	Arg	Pro	Ala	Gly	Cys	Ala	Arg	His	Pro	Ala
				85					90					95	
Val	Arg	Trp	Arg	His	Pro	Gly	Val	Ala	Lys	Pro	Gly	Cys	Gly	Asn	Ala
				100				105						110	

<210> 1737

<211> 506

<212> DNA

<213> Homo sapiens

<400> 1737

acgcgtgttc accatgacct ggaccgcca gcggcccgac gggtcgagcg cggaggagtc
60
ggacgagacg actgtggtgg tccctgcat ctcagcgccc cacgggtacg acgtgcaggc
120
gtccggcgcc cacgtcacct cccaccagg cgaccgggtg gcgcggttgc acctcaacca
180
aggcagtacc acggcgaagg tcacgatcac cctgcgctaa cccttcaagc gtcttcagca
240
ccgacctata agtctcccag acacttttac gaccggccct ccccttggg gtgggccccg
300
tccttttcgt gtcgtgggat gcacctggca gcaccacctc cgcccccat ggagaacagt
360

aggtatcctc gcagggtact acggccaagg catatttgac gttccacgct tgccactgcc
 420
 gtcttagggc catactgccg ccacgcagct gagacggtga ccaatcgggt aaggtgactg
 480
 gttgccgtag tccatgcgag gccggc
 506

<210> 1738
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1738
 Met Ala Leu Arg Arg Gln Trp Gln Ala Trp Asn Val Lys Tyr Ala Leu
 1 5 10 15
 Ala Val Val Pro Cys Glu Asp Thr Tyr Cys Ser Pro Trp Gly Pro Glu
 20 25 30
 Val Val Leu Pro Gly Ala Ser His Asp Thr Lys Arg Thr Gly Pro Thr
 35 40 45
 Pro Arg Gly Arg Ala Gly Arg Lys Ser Val Trp Glu Thr Tyr Arg Ser
 50 55 60
 Val Leu Lys Thr Leu Glu Gly Leu Ala Gln Gly Asp Arg Asp Leu Arg
 65 70 75 80
 Arg Gly Thr Ala Leu Val Glu Val Gln Pro Arg His Pro Val Ala Trp
 85 90 95
 Val Gly Gly Asp Val Gly Ala Gly Arg Leu His Val Val Pro Val Gly
 100 105 110
 Arg

<210> 1739
 <211> 420
 <212> DNA
 <213> Homo sapiens

<400> 1739
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 120
 gagtctgggc cattggttag cacgtttaat tcaatagagg actattatca aaccatggt
 180
 cgagagtggg agtggtatgc catgggttaa gcccggtgta ttggtgttga ggacgagtat
 240
 aaacaagcgt tagaaaggat gttaaggcct ttcgtattta gacgttacat tgatttttagc
 300
 gctattgatt ctttgcgaaa aatgaaaacg atgatcagtg ctgaagtctg tcgcaagggg
 360
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 420

<210> 1740
 <211> 140
 <212> PRT

<213> Homo sapiens

<400> 1740

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Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
 1             5             10             15
Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
      20             25             30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
      35             40             45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
      50             55             60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
      65             70             75             80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
      85             90             95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
      100            105            110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
      115            120            125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
      130            135            140

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<210> 1741

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1741

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nnacgcgtcg aggtgattca ggccgacgcc actgaccgcg tggtccttca cagtctcaat
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120
accgagacgg ccagcacga gccacgggtg gcgctctatg gcggggggccc ggacgggtga
180
gagattccga ttgacgtcct gngtgcgctc agtcgcgctg ctgccaccgg cggagtgcctc
240
gtcatggagc acgaccacga gcagggggcg ctgctgccgg cggccgcttc gtgagccggg
300
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cgtaaaccgc gctggtag
378

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<210> 1742

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1742

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Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
 1             5             10             15
His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
      20             25             30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

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35 40 45
 Thr Val Ala Leu Tyr Gly Gly Gly Pro Asp Gly
 50 55

<210> 1743

<211> 4121

<212> DNA

<213> Homo sapiens

<400> 1743

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 180
 cccaacttcc ggcaggtgca ggggtgggctc actgtgttcg gcatgggaca gccagcctc
 240
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 300
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 360
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 420
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 480
 aacacatacc atgtgtacca taacaccgag gacctgtggg gggagcccca tgcgtggcc
 540
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 1080
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 1320

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1980
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 3120
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 4020
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 4121

<210> 1744

<211> 796

<212> PRT

<213> Homo sapiens

<400> 1744

Ile Thr Tyr Asn Cys Lys Glu Glu Phe Gln Ile His Asp Glu Leu Leu
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 Lys Ala His Tyr Thr Leu Gly Arg Leu Ser Asp Asn Thr Pro Glu His
 20 25 30
 Tyr Leu Val Gln Gly Arg Tyr Phe Leu Val Arg Asp Val Thr Glu Lys
 35 40 45
 Met Asp Val Leu Gly Thr Val Gly Ser Cys Gly Ala Pro Asn Phe Arg

50		55		60
Gln Val Gln Gly Gly Leu Thr Val Phe Gly Met Gly Gln Pro Ser Leu				
65	70	75	80	
Ser Gly Phe Arg Arg Val Leu Gln Lys Leu Gln Lys Asp Gly His Arg				
	85	90	95	
Glu Cys Val Ile Phe Cys Val Arg Glu Glu Pro Val Leu Phe Leu Arg				
	100	105	110	
Ala Asp Glu Asp Phe Val Ser Tyr Thr Pro Arg Asp Lys Gln Asn Leu				
	115	120	125	
His Glu Asn Leu Gln Gly Leu Gly Pro Gly Val Arg Val Glu Ser Leu				
	130	135	140	
Glu Leu Ala Ile Arg Lys Glu Ile His Asp Phe Ala Gln Leu Ser Glu				
145	150	155	160	
Asn Thr Tyr His Val Tyr His Asn Thr Glu Asp Leu Trp Gly Glu Pro				
	165	170	175	
His Ala Val Ala Ile His Gly Glu Asp Asp Leu His Val Thr Glu Glu				
	180	185	190	
Val Tyr Lys Arg Pro Leu Phe Leu Gln Pro Thr Tyr Arg Tyr His Arg				
	195	200	205	
Leu Pro Leu Pro Glu Gln Gly Ser Pro Leu Glu Ala Gln Leu Asp Ala				
	210	215	220	
Phe Val Ser Val Leu Arg Glu Thr Pro Ser Leu Leu Gln Leu Arg Asp				
225	230	235	240	
Ala His Gly Pro Pro Pro Ala Leu Val Phe Ser Cys Gln Met Gly Val				
	245	250	255	
Gly Arg Thr Asn Leu Gly Met Val Leu Gly Thr Leu Ile Leu Leu His				
	260	265	270	
Arg Ser Gly Thr Thr Ser Gln Pro Glu Ala Ala Pro Thr Gln Ala Lys				
	275	280	285	
Pro Leu Pro Met Glu Gln Phe Gln Val Ile Gln Ser Phe Leu Arg Met				
	290	295	300	
Val Pro Gln Gly Arg Arg Met Val Glu Glu Val Asp Arg Ala Ile Thr				
305	310	315	320	
Ala Cys Ala Glu Leu His Asp Leu Lys Glu Val Val Leu Glu Asn Gln				
	325	330	335	
Lys Lys Leu Glu Gly Ile Arg Pro Glu Ser Pro Ala Gln Gly Ser Gly				
	340	345	350	
Ser Arg His Ser Val Trp Gln Arg Ala Leu Trp Ser Leu Glu Arg Tyr				
	355	360	365	
Phe Tyr Leu Ile Leu Phe Asn Tyr Tyr Leu His Glu Gln Tyr Pro Leu				
	370	375	380	
Ala Phe Ala Leu Ser Phe Ser Arg Trp Leu Cys Ala His Pro Glu Leu				
385	390	395	400	
Tyr Arg Leu Pro Val Thr Leu Ser Ser Ala Gly Pro Val Ala Pro Arg				
	405	410	415	
Asp Leu Ile Ala Arg Gly Ser Leu Arg Glu Asp Asp Leu Val Ser Pro				
	420	425	430	
Asp Ala Leu Ser Thr Val Arg Glu Met Asp Val Ala Asn Phe Arg Arg				
	435	440	445	
Val Pro Arg Met Pro Ile Tyr Gly Thr Ala Gln Pro Ser Ala Lys Ala				
	450	455	460	
Leu Gly Ser Ile Leu Ala Tyr Leu Thr Asp Ala Lys Arg Arg Leu Arg				
465	470	475	480	
Lys Val Val Trp Val Ser Leu Arg Glu Glu Ala Val Leu Glu Cys Asp				

485								490					495				
Gly	His	Thr	Tyr	Ser	Leu	Arg	Trp	Pro	Gly	Pro	Pro	Val	Ala	Pro	Asp		
500								505				510					
Gln	Leu	Glu	Thr	Leu	Glu	Ala	Gln	Leu	Lys	Ala	His	Leu	Ser	Glu	Pro		
515								520				525					
Pro	Pro	Gly	Lys	Glu	Gly	Pro	Leu	Thr	Tyr	Arg	Phe	Gln	Thr	Cys	Leu		
530								535				540					
Thr	Met	Gln	Glu	Val	Phe	Ser	Gln	His	Arg	Arg	Ala	Cys	Pro	Gly	Leu		
545				550				555				560					
Thr	Tyr	His	Arg	Ile	Pro	Met	Pro	Asp	Phe	Cys	Ala	Pro	Arg	Glu	Glu		
565								570				575					
Asp	Phe	Asp	Gln	Leu	Leu	Glu	Ala	Leu	Arg	Ala	Ala	Leu	Ser	Lys	Asp		
580								585				590					
Pro	Gly	Thr	Gly	Phe	Val	Phe	Ser	Cys	Leu	Ser	Gly	Gln	Gly	Arg	Thr		
595								600				605					
Thr	Thr	Ala	Met	Val	Val	Ala	Val	Leu	Ala	Phe	Trp	His	Ile	Gln	Gly		
610				615				620									
Phe	Pro	Glu	Val	Gly	Glu	Glu	Glu	Leu	Val	Ser	Val	Pro	Asp	Ala	Lys		
625				630				635				640					
Phe	Thr	Lys	Gly	Glu	Phe	Gln	Val	Val	Met	Lys	Val	Val	Gln	Leu	Leu		
645								650				655					
Pro	Asp	Gly	His	Arg	Val	Lys	Lys	Glu	Val	Asp	Ala	Ala	Leu	Asp	Thr		
660								665				670					
Val	Ser	Glu	Thr	Met	Thr	Pro	Met	His	Tyr	His	Leu	Arg	Glu	Ile	Ile		
675								680				685					
Ile	Cys	Thr	Tyr	Arg	Gln	Ala	Lys	Ala	Ala	Lys	Glu	Ala	Gln	Glu	Met		
690				695				700									
Arg	Arg	Leu	Gln	Leu	Arg	Ser	Leu	Gln	Tyr	Leu	Glu	Arg	Tyr	Val	Cys		
705				710				715				720					
Leu	Ile	Leu	Phe	Asn	Ala	Tyr	Leu	His	Leu	Glu	Lys	Ala	Asp	Ser	Trp		
725								730				735					
Gln	Arg	Pro	Phe	Ser	Thr	Trp	Met	Gln	Glu	Val	Ala	Ser	Lys	Ala	Gly		
740								745				750					
Ile	Tyr	Glu	Ile	Leu	Asn	Glu	Leu	Gly	Phe	Pro	Glu	Leu	Glu	Ser	Gly		
755								760				765					
Glu	Asp	Gln	Pro	Phe	Ser	Arg	Leu	Arg	Tyr	Arg	Trp	Gln	Glu	Gln	Ser		
770				775				780									
Cys	Ser	Leu	Glu	Pro	Ser	Ala	Pro	Glu	Asp	Leu	Leu						
785				790				795									

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<210> 1745
<211> 426
<212> DNA
<213> Homo sapiens
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<400> 1745
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120
actgttaacc gttagcggttc tgaagaaaaa cgttgggaca aaatccaaga attggttaaa
180
aaagacggta tcactttgga atttacggag ttcacaggct actcacaacc aaacaaggca
240
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actgctgatg gcgaagtaga tttgaacgct ttccaacact ataacttctt gaacaactgg
 300
 aacaaagaaa acgggaaaga ccttgtagcg attgcagata cttacatctc tccaatccgt
 360
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 420
 tcgcga
 426

<210> 1746
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1746
 Xaa Met Lys Ile Lys Lys Trp Leu Gly Val Ala Ala Leu Ala Thr Val
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 Ala Gly Leu Ala Leu Ala Ala Cys Gly Asn Ser Glu Lys Lys Ala Asp
 20 25 30
 Asn Ala Thr Thr Ile Lys Ile Ala Thr Val Asn Arg Ser Gly Ser Glu
 35 40 45
 Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile
 50 55 60
 Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala
 65 70 75 80
 Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe
 85 90 95
 Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala
 100 105 110
 Asp Thr Tyr Ile Ser Pro Ile Arg Leu Tyr Ser Gly Leu Asn Gly Ser
 115 120 125
 Asp Asn Lys Tyr Thr Lys Val Glu Ala Gly Val Cys Ser Arg
 130 135 140

<210> 1747
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1747
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 360
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 373

<210> 1748
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1748
 Met Val Thr His Arg Pro Glu Leu His Ile Thr Ala Pro Glu Gly Val
 1 5 10 15
 Leu Glu Ala Pro Ala Gly Ser Leu Leu Lys Asp Gly Thr Trp His Ile
 20 25 30
 Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His
 35 40 45
 Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp
 50 55 60
 Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val
 65 70 75 80
 Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly
 85 90 95
 Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr
 100 105 110
 Ala

<210> 1749
 <211> 853
 <212> DNA
 <213> Homo sapiens

<400> 1749
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 120
 aaggggagga gagtgagggc caagaacgag ccttaaggga gcagtcccaa gctggagcca
 180
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 360
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 420
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ggccgtaacc ctagtttgcc tgaggccctt atgtcccctt atgttcctgg tactggagct
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 840
 aggacactga gga
 853

<210> 1750
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 1750
 Glu Lys Pro Arg Thr His Cys Val Leu Ala Pro Leu Arg Pro Ala Trp
 1 5 10 15
 His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu
 20 25 30
 Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro
 35 40 45
 Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala
 50 55 60

<210> 1751
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1751
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 120
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 180
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 420
 gacggtgagg tttggtcctc ctcgaggcgc ggcttcacct ggaacgggct gcagacatga
 480
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 531

<210> 1752
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1752
 Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

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Arg	Gln	Gly	His
20	25	30	
Gly	Val	Ser	Glu
35	40	45	
Glu	Arg	Gln	Arg
50	55	60	
Ile	Leu	Phe	Leu
65	70	75	80
Ile	Asp	Leu	Leu
85	90	95	
Val	Ile	His	Asp
100	105	110	
Val	Leu	Asp	Ser
115	120	125	
Leu	Thr	Pro	Gly
130	135	140	
Trp	Ser	Ser	Ser
145	150	155	

<210> 1753

<211> 920

<212> DNA

<213> Homo sapiens

<400> 1753

gagacagtgg agaggctggg tcagtcccct gccaggaca ccccggtcct ggggccttgc
 60
 tgggacccga tggctctggg gactcagggc cgctgctgc tggacagga ttccaaggac
 120
 acacagacca ggatcagcca aaagggccgc cgtctgcagc ccccggggac tccctcggcc
 180
 ccaccccaga gaagggcccg gaaacagctg aaccctgcc ggggcaccga gagagtggac
 240
 cctgggttcg agggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc
 300
 atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatccccctgc agatgctgtt
 360
 gggggccntg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg
 420
 gagccccggc gctgtgcttc ctgtcggacc cagaggaccc cgctctggag agacgctgaa
 480
 gatgggaccc ttctctgcaa cgctgtggg atcaggtaca agaaatacgg cactcgctgc
 540
 tccagctgct ggctggtgcc caggaaaaat gtccagccca agaggctatg tggcagatgt
 600
 ggagtgtccc tggaccccat tcaggaaggt taaaccagc ttcaccctgc tgagctgctg
 660
 cttctgcctc cgtttcacca gtgggagaat gggcagaagc agctctccta ggaggattgg
 720
 ggaaagagcc ggctgcctc ctctctgcca tctccagatt caaggatccc gggggaagac
 780
 ccaggcctca ggtggcagag cctgctaggg gtcaccagcc cttctccag tcagccttgg
 840

ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata
 900
 aagtacagag atatgccgag
 920

<210> 1754

<211> 210

<212> PRT

<213> Homo sapiens

<400> 1754

Glu	Thr	Val	Glu	Arg	Leu	Gly	Gln	Ser	Pro	Ala	Gln	Asp	Thr	Pro	Val
1				5					10					15	
Leu	Gly	Pro	Cys	Trp	Asp	Pro	Met	Ala	Leu	Gly	Thr	Gln	Gly	Arg	Leu
			20					25					30		
Leu	Leu	Asp	Arg	Asp	Ser	Lys	Asp	Thr	Gln	Thr	Arg	Ile	Ser	Gln	Lys
		35					40					45			
Gly	Arg	Arg	Leu	Gln	Pro	Pro	Gly	Thr	Pro	Ser	Ala	Pro	Pro	Gln	Arg
	50					55					60				
Arg	Pro	Arg	Lys	Gln	Leu	Asn	Pro	Cys	Arg	Gly	Thr	Glu	Arg	Val	Asp
65					70				75					80	
Pro	Gly	Phe	Glu	Gly	Val	Thr	Leu	Lys	Phe	Gln	Ile	Lys	Pro	Asp	Ser
			85					90						95	
Ser	Leu	Gln	Ile	Ile	Pro	Thr	Tyr	Ser	Leu	Pro	Cys	Ser	Ser	Arg	Ser
		100						105					110		
Gln	Glu	Ser	Pro	Ala	Asp	Ala	Val	Gly	Gly	Xaa	Ala	Ala	Ile	Pro	Glu
	115						120					125			
Gly	Thr	Glu	Gly	His	Ser	Ala	Gly	Ser	Glu	Ala	Leu	Glu	Pro	Arg	Arg
	130					135					140				
Cys	Ala	Ser	Cys	Arg	Thr	Gln	Arg	Thr	Pro	Leu	Trp	Arg	Asp	Ala	Glu
145					150					155				160	
Asp	Gly	Thr	Leu	Leu	Cys	Asn	Ala	Cys	Gly	Ile	Arg	Tyr	Lys	Lys	Tyr
			165						170					175	
Gly	Thr	Arg	Cys	Ser	Ser	Cys	Trp	Leu	Val	Pro	Arg	Lys	Asn	Val	Gln
	180						185						190		
Pro	Lys	Arg	Leu	Cys	Gly	Arg	Cys	Gly	Val	Ser	Leu	Asp	Pro	Ile	Gln
	195						200						205		
Glu	Gly														
	210														

<210> 1755

<211> 437

<212> DNA

<213> Homo sapiens

<400> 1755

nnntctgcag agtagggaga cagtcttggg cctggatggc cattagtgct tggagtcag
 60
 ggagcaatca gaaatgatca aggagaatcc ttgatacgaa ctgcattcca gtgtcttcag
 120
 ttggttgatga cagattttct accaacaatg ccttgactt gcctgcaa at agttgtagat
 180
 gttgcaggta gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaataggt
 240

ttattgtgga atatttcaga ttatttttttc caaagagggg aaactattga aaaagaacta
 300
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagttgt tttaaatcgg
 360
 ccattccacc ctgcaccgcc atttgattgc ttgtgggttat gtctttatgc aaaattgggt
 420
 gaactatgtg tggatcc
 437

<210> 1756

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1756

Met	Gly	Ala	Ile	Arg	Asn	Asp	Gln	Gly	Glu	Ser	Leu	Ile	Arg	Thr	Ala
1					5				10					15	
Phe	Gln	Cys	Leu	Gln	Leu	Val	Val	Thr	Asp	Phe	Leu	Pro	Thr	Met	Pro
			20					25					30		
Cys	Thr	Cys	Leu	Gln	Ile	Val	Val	Asp	Val	Ala	Gly	Ser	Phe	Gly	Leu
			35				40					45			
His	Asn	Gln	Glu	Leu	Asn	Ile	Ser	Leu	Thr	Ser	Ile	Gly	Leu	Leu	Trp
	50					55					60				
Asn	Ile	Ser	Asp	Tyr	Phe	Phe	Gln	Arg	Gly	Glu	Thr	Ile	Glu	Lys	Glu
65					70					75				80	
Leu	Asn	Lys	Glu	Glu	Ala	Ala	Gln	Gln	Lys	Gln	Ala	Glu	Glu	Lys	Gly
			85					90					95		
Val	Val	Leu	Asn	Arg	Pro	Phe	His	Pro	Ala	Pro	Pro	Phe	Asp	Cys	Leu
			100					105					110		
Trp	Leu	Cys	Leu	Tyr	Ala	Lys	Leu	Gly	Glu	Leu	Cys	Val	Asp		
		115					120					125			

<210> 1757

<211> 1297

<212> DNA

<213> Homo sapiens

<400> 1757

nggatccgac ggaaatagaa ttgaaggcat tctaaaatgg ctaaccgtac agtgaaggat
 60
 gcgcacagca tccatggcac caaccctcaa tatctggtgg agaagatcat tcgaacgcga
 120
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc
 180
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca
 240
 ccctttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta
 300
 gagtttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg
 360
 ctgacaggca ctgcaattga ttgctacaag tacttggaac ctttgtacaa tgactatcga
 420
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt
 480

gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc
 540
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg
 600
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcc
 660
 tcacctgac accgccggag aagctaccga gacttggaca agccccgtcg ctctcccaca
 720
 ctgcgctaca ggaggagtag gagccggtct cccagaaggc ggagtcgac tcccaaaagg
 780
 agaagcccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc
 840
 aggtcccag atcggcggca cagatcccgt tccaagtccc caggtcatca ccgtagtcac
 900
 agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg
 960
 agagggaatg agtaatggac tcagtttggg tttagtccac atggcctcct gtggatataa
 1020
 ggatatctgt atgtggaagg attaagatct cccccaggca gctataagaa tatttttagtt
 1080
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc
 1140
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta
 1200
 tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc
 1260
 tgatgaccct ttcccttttt attaaaccgg acacacc
 1297

<210> 1758

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1758

Met	Ala	Asn	Arg	Thr	Val	Lys	Asp	Ala	His	Ser	Ile	His	Gly	Thr	Asn
1				5					10					15	
Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20					25					30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
		35					40					45			
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
	50					55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
65					70					75				80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
			85						90					95	
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
		100					105						110		
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
		115					120					125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
	130				135						140				
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

145 150 155 160
 Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
 165 170 175
 Leu Glu Pro Arg Val Ser Ala Leu Glu Asp Met Asp Asp Val Glu
 180 185 190
 Ser Ser Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
 195 200 205
 Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
 210 215 220
 Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Ser Pro Arg
 225 230 235 240
 Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
 245 250 255
 Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
 260 265 270
 Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
 275 280 285
 Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
 290 295 300
 Lys Lys Ser Arg Arg Gly Asn Glu
 305 310

<210> 1759
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 1759
 aattccatag tcctcatggg caagagttac acagcgtgga ggaccaactc ccaggcactc
 60
 ggcttgggca gacacaatta ttgtcgggaat ccagatgggtg atgccagacc ttggtgccat
 120
 gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt
 180
 ggctgagggc agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc
 240
 acctcacacc cttggcaggc tgccatcttt gtcagcaaca agaggtctcc tggagagaga
 300
 ttcctttgtg gaggggtgct gac
 324

<210> 1760
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1760
 Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
 1 5 10 15
 Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
 20 25 30
 Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
 35 40 45
 Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

50		55		60											
Cys	Lys	Arg	Pro	Gln	Phe	Arg	Thr	Lys	Gly	Gly	Leu	Tyr	Thr	Asp	Ile
65				70					75						80
Thr	Ser	His	Pro	Trp	Gln	Ala	Ala	Ile	Phe	Val	Ser	Asn	Lys	Arg	Ser
			85						90					95	
Pro	Gly	Glu	Arg	Phe	Leu	Cys	Gly	Gly	Val	Leu	Ile				
			100					105							

<210> 1761
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1761
 ngcgatctcg gctcactaca acctcgggtga cagagcgaga ctctatccca aaaaaataaa
 60
 aataaaaaatc aactggagaa ggaaatgggg ttgggggagca tcctctgaat atataaaggc
 120
 agccattcat tgtaggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
 180
 gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccgca gtaagacccc
 240
 acagtggggc caggtgggtct tgcaccctgt attcccactt tggtcggggc agcccagagt
 300
 ccaggccagc aggtaatgcc ccagccatgc ccactcggtc ctattggatc c
 351

<210> 1762
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1762
Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
1 5 10 15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
20 25 30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
35 40 45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
50 55 60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65 70 75 80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
85 90 95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
100 105

<210> 1763
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 1763

gcgcgccggg ggcgcgatgt ggagcgggca cttaccggtt tcatggccaa gacaggcgag
 60
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagaccttc
 120
 accatcccct acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag
 180
 acagattcct cggagcagga tgaacagaca gacacagaga accttgctct tcatatcagc
 240
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg
 300
 tcgggtagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt
 356

<210> 1764

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1764

Ala	Arg	Arg	Gly	Arg	Asp	Val	Glu	Arg	Ala	Leu	Thr	Arg	Phe	Met	Ala
1			5						10					15	
Lys	Thr	Gly	Glu	Thr	Gln	Ser	Leu	Phe	Lys	Asp	Asp	Val	Ser	Thr	Phe
		20						25					30		
Pro	Leu	Ile	Ala	Ala	Arg	Pro	Phe	Thr	Ile	Pro	Tyr	Leu	Thr	Ala	Leu
		35					40					45			
Leu	Pro	Ser	Glu	Leu	Glu	Met	Gln	Gln	Met	Glu	Glu	Thr	Asp	Ser	Ser
	50					55				60					
Glu	Gln	Asp	Glu	Gln	Thr	Asp	Thr	Glu	Asn	Leu	Ala	Leu	His	Ile	Ser
65					70				75					80	
Met	Glu	Asp	Ser	Gly	Ala	Glu	Lys	Glu	Asn	Thr	Ser	Val	Leu	Gln	Gln
			85						90					95	
Asn	Pro	Ser	Leu	Ser	Gly	Ser	Arg	Asn	Gly	Glu	Glu	Asn	Ile	Ile	Asp
			100					105					110		
Asn	Pro	Tyr	Leu	Arg	Pro										
			115												

<210> 1765

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1765

cggccgcatt cttcgtgact ggcgccccgc cgccgggtgca aaagtgtcag gaaataccag
 60
 tcatgactat gtttagccgc acctctctgc agtatgcgat cgttctggca gcgctgggag
 120
 gtgccggtct ggcgctcttg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg
 180
 cccaggccag gccaggcatt attgcggcgg cgcgcggtgt cgtggatgtc gagggcgggc
 240
 tgctgcggct ctccaccag cgcgacgggg tgattcagga tgtgcgggtg aaggaaggac
 300
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgccgcgaa ctgatcg
 357

<210> 1766
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1766
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala
 1 5 10 15
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr
 20 25 30
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala
 35 40 45
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser
 50 55 60
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln
 65 70 75 80
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu
 85 90 95
 Leu Ile

<210> 1767
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1767
 nnnncgccgac ggccgccatg acgcaccgca ttgacgtgaa ccagggcgac gatgcccaacc
 60
 ccggccaaca cgccaggctg cttgacgccc ccagccaacc cgacgaacgc cccaccaaga
 120
 acgagccccga gccatccccg gccaatcaac gccagacgta tggccacaac gagtgcgacg
 180
 agggacaaaac ccacctggag tccgtcggtg tgcattgcccc ccaccacgct caacgtcgtc
 240
 aatggacagc acaccgccag ccagaggggca tgatccggat cggttccggc gtagcgn
 297

<210> 1768
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 1768
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn
 1 5 10 15
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile
 20 25 30
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr
 35 40 45
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn
 50 55 60
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 1769
 caccatgctg gctcgggttcg acgcattcgg gtgggtgagt ctgttctcgt caccgacggg
 60
 cagggtcatg ccgttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag
 120
 accgttgaga tcctccatac tcccgcgacc acgcatcgat gggtcgccgt ccaggcattg
 180
 ccgaagtccg atagagctga gctggcggtg gcgaccctca ccgagatggg agttcacgaa
 240
 atcctcgctt ggcaggctga tcggagcatc gtgcatgga agggcgacaa gcaagccaag
 300
 ggcgtcgca ggtggcaagc ggctgcccgt gaggccacca aacagtctcg acgttttctt
 360
 gtgccacagg tagaactagc gcaaaccctg gaagttgtta agcggatttg caatgccag
 420
 gccgcctacg ttttgacga gtcggccagt gaaccgctgg tgcacagga gctc
 474

<210> 1770
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 1770
 His His Ala Gly Ser Val Arg Arg Ile Arg Val Gly Glu Ser Val Leu
 1 5 10 15
 Val Thr Asp Gly Gln Gly His Ala Val Arg Gly Pro Ala Ile Glu Val
 20 25 30
 Thr Lys Gly Ser Val Ser Val Glu Thr Val Glu Ile Leu His Thr Pro
 35 40 45
 Ala Thr Thr His Arg Trp Val Ala Val Gln Ala Leu Pro Lys Ser Asp
 50 55 60
 Arg Ala Glu Leu Ala Val Ala Thr Leu Thr Glu Met Gly Val His Glu
 65 70 75 80
 Ile Leu Ala Trp Gln Ala Asp Arg Ser Ile Val Arg Trp Lys Gly Asp
 85 90 95
 Lys Gln Ala Lys Gly Val Ala Arg Trp Gln Ala Ala Ala Arg Glu Ala
 100 105 110
 Thr Lys Gln Ser Arg Arg Phe Leu Val Pro Gln Val Glu Leu Ala Gln
 115 120 125
 Thr Arg Glu Val Val Lys Arg Ile Cys Asn Ala Gln Ala Ala Tyr Val
 130 135 140
 Leu His Glu Ser Ala Ser Glu Pro Leu Val His Gln Glu Leu
 145 150 155

<210> 1771
 <211> 287

<212> DNA

<213> Homo sapiens

<400> 1771

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat
60
taataacagc ggggtgtcgca gaggaagaag cctggggagaa tggaagtcag ggaaggagag
120
caacaggctt ctcaactctgt gccatgagca tgtgctagcc atggagacac tctgcatgtt
180
acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaata
240
cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac
287

<210> 1772

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1772

Met	Gly	Asn	Ser	Asn	Thr	Cys	Lys	Glu	Leu	Ser	Leu	Gln	Val	Tyr	Ser
1				5				10				15			
Asp	Ile	Asn	Asn	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ser	Leu	Gly	Glu	Trp
		20					25					30			
Lys	Ser	Gly	Lys	Glu	Ser	Asn	Arg	Leu	Leu	Thr	Leu	Cys	His	Glu	His
		35				40					45				
Val	Leu	Ala	Met	Glu	Thr	Leu	Cys	Met	Leu	Pro	Arg	Thr	Ala	Asp	Ser
	50					55				60					
Leu	Leu	Trp	Asn	Tyr	Ser	Ala	Ile	Gln	Asp	Pro	Val	Lys	Tyr	Ser	Lys
65			70					75				80			
Gln	Leu	Ser	Phe	Ile	His	Thr	His	Val	His	Pro	Cys	Ala			
			85					90							

<210> 1773

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1773

accggtgagt tctacgtccc ggtaaccac ctcgagggtg aacaggcgca cctcgacgtc
60
ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc
120
cgtccggatt ctctggtatt gtgggaagcc caattcggcg atttcaccaa cggtgcccag
180
acgatcatcg atgagttcat cgctcggct ggctccaagt ggggtcagaa gtcgggagtc
240
gtgctgctgc tgccgcacgg ttacgaaggt caggggacctg atcactcgtc ggcccgtctg
300
gagcgcttcc tcaatctatg cagtgaagac gctttggccg tctgccagcc ctcgaccccg
360
gcaagctaca gccatttatt gcgtcagcac gcg
393

<210> 1774
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 1774
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala
 1 5 10 15
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly
 20 25 30
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp
 35 40 45
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp
 50 55 60
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val
 65 70 75 80
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser
 85 90 95
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu
 100 105 110
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg
 115 120 125
 Gln His Ala
 130

<210> 1775
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 1775
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagcccg gccctggtaa
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 cgggagggca tcgctagggg ggggtggggc ggcccggcct cgatgcagcc atgtgggagg
 120
 gccactctca gagaccccc ccttctcttg ccacccccac cccagagggg aagctggagc
 180
 tgggaggctg cagacccagg ccaaggtgtg gccagggctg gctttcttgg gaggtttga
 240
 gcactctgct tcttgccac ccagctctgg ggctgctgtc aactcttgat ttgtagacat
 300
 cactccagcc tctggcctgt caccctgaac ctcccccatg tctgtgtctt ttctcactgg
 360
 aacaccggt
 369

<210> 1776
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 1776
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln


```

      1             5             10             15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
      20             25             30
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
      35             40             45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
      50             55

```

<210> 1777

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1777

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agcttcttat cactatcctt tagtgctttt tggctctacct tagcggtaat gctccatcaa
60
gaatatgggtt ttggtagtgc aactgcggga ttttttggcc tcgctggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctctttc gcctctatgt tgttattgcc ttacttcagt
240
atcagtaccc aagttataat gattattggt gctaccatag tgtttgactt tgggtgttcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
360
cttaacgcgt
370

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<210> 1778

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1778

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Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
 1             5             10             15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
      20             25             30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
      35             40             45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
      50             55             60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
      65             70             75             80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
      85             90             95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
      100             105             110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
      115             120

```

<210> 1779

<211> 345

<212> DNA
<213> Homo sapiens

<400> 1779
ccatgtgtgt gtatatgctc gtgtgtgatg gtatgtatat gtgtatatgt gnntatatgt
60
atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg
120
gtatgtgtgt gcatgtgctg atgggtgtgt atatgtgtat atatgtagggt gtgtatatct
180
gggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac
240
ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat ggnggtgtgt atgtacatgt
300
atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg
345

<210> 1780
<211> 55
<212> PRT
<213> Homo sapiens

<400> 1780
Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr
1 5 10 15
Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr
20 25 30
Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp
35 40 45
Val Cys Ile Cys Val Tyr Met
50 55

<210> 1781
<211> 349
<212> DNA
<213> Homo sapiens

<400> 1781
nacgcgtcat gctaaatttt gccctttatg gcaacatttt cgtcagaaca agcggaagag
60
aagctactat ccaagtttca tacgccggtt aaaagaaaac atgatgatac gagatcatct
120
gatgtgaaca caacgcaaac tggttcaagc gccacgceca ttacacctgt acccttactg
180
cccagtgcac aagagcccag ttatctttgc cagtgggtgag ctccccagac acgaaagcac
240
aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaactac ttgttcgcta
300
cgatccgcac atgatggcag catgctagtg acgaatgctg ccttccgga
349

<210> 1782
<211> 107
<212> PRT

<213> Homo sapiens

<400> 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1           5           10           15
Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
 20           25           30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
 35           40           45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
 50           55           60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
65           70           75           80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
 85           90           95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
          100          105

```

<210> 1783

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 1783

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gtgcacgact tcgacgccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac
60
agcatgagtg atgtcttggc attgcccatt ttcaagcagg aagattccag ccttccattg
120
gatggtgaaa cagagcaccc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgctggata atcggaaaat gggatgatatg cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaataca cagagcatca gcaacttgaa
360
ggatggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatt cggttgaatt tctgtgggac
480
ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
540
cggaagcacg gaggtgaaaa gggagtgcgc tttaggatcc aggttgacac cttaagcag
600
aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
720
gctcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttgccgcag actacggtga ttctctggca aagcgaggca gttgttctcc gtggcccgat
900

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gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag
 960
 cagagcactt gcagtgtccc agacagcaat tcttcttccc caaatcatca gggagatgga
 1020
 gcttcacaga cctctgggtga acaaattcag ccttcagcta cgatccagga aacacagcaa
 1080
 tggctgtca aaaacagatt ctcttcctac acaagactgt tctctaattt ttcagggtgcc
 1140
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt
 1200
 cggctctata attcactgaa gtcaagggtcg gttagacccc gtttaaccat ctatgtctgc
 1260
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcgaagc
 1320
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttggaaga aatgattgcc
 1380
 tcagaagttg ctgaaaaact tgcgctgggtg tttaatatcc ctctccacca aattaatcag
 1440
 gtttacagac aggggtccac cggtattcac attcttggtta gtgatcaggt aaatcaaate
 1500
 atttggtttt ccttttcaga ctggtattta cttttatata tgtaattgta gaactgtaga
 1560
 aaaattctgt gacctctttt gaaaatactt atgagaatca ttttcagaga gttgggaatc
 1620
 actttggaag aacttataac caagagtttc aggcaccta gtgataatat ggaatacaag
 1680
 ccaaggaaaa ctggcttagc ctccccccag cccttttagga tgcagccaat cactggggca
 1740
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc
 1800
 cttttgtcta ttatttgatg actaattta
 1829

<210> 1784

<211> 514

<212> PRT

<213> Homo sapiens

<400> 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1				5					10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
			20					25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
		50				55					60				
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
65					70				75					80	
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
			85					90						95	
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
		100					105						110		
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly

115															120															125																	
Asp	Arg	Leu	Leu	Asp	Leu	Asp	Ile	Pro	Met	Ser	Val	Gly	Ile	Ile	Asp	Asp	Arg	Leu	Leu	Asp	Leu	Asp	Ile	Pro	Met	Ser	Val	Gly	Ile	Ile	Asp	Asp	Arg	Leu	Leu	Asp	Leu	Asp	Ile	Pro	Met	Ser	Val	Gly	Ile	Ile	Asp
130															135															140																	
Thr	Arg	Thr	Asn	Pro	Gly	Gln	Leu	Asn	Ala	Val	Glu	Phe	Leu	Trp	Asp	Thr	Arg	Thr	Asn	Pro	Gly	Gln	Leu	Asn	Ala	Val	Glu	Phe	Leu	Trp	Asp	Thr	Arg	Thr	Asn	Pro	Gly	Gln	Leu	Asn	Ala	Val	Glu	Phe	Leu	Trp	Asp
145															150															155																	
Pro	Ala	Lys	Arg	Thr	Ser	Ala	Phe	Ile	Gln	Val	His	Cys	Ile	Ser	Thr	Pro	Ala	Lys	Arg	Thr	Ser	Ala	Phe	Ile	Gln	Val	His	Cys	Ile	Ser	Thr	Pro	Ala	Lys	Arg	Thr	Ser	Ala	Phe	Ile	Gln	Val	His	Cys	Ile	Ser	Thr
165															170															175																	
Glu	Phe	Thr	Pro	Arg	Lys	His	Gly	Gly	Glu	Lys	Gly	Val	Pro	Phe	Arg	Glu	Phe	Thr	Pro	Arg	Lys	His	Gly	Gly	Glu	Lys	Gly	Val	Pro	Phe	Arg	Glu	Phe	Thr	Pro	Arg	Lys	His	Gly	Gly	Glu	Lys	Gly	Val	Pro	Phe	Arg
180															185															190																	
Ile	Gln	Val	Asp	Thr	Phe	Lys	Gln	Asn	Glu	Asn	Gly	Glu	Tyr	Thr	Asp	Ile	Gln	Val	Asp	Thr	Phe	Lys	Gln	Asn	Glu	Asn	Gly	Glu	Tyr	Thr	Asp	Ile	Gln	Val	Asp	Thr	Phe	Lys	Gln	Asn	Glu	Asn	Gly	Glu	Tyr	Thr	Asp
195															200															205																	
His	Leu	His	Ser	Ala	Ser	Cys	Gln	Ile	Lys	Val	Phe	Lys	Pro	Lys	Gly	His	Leu	His	Ser	Ala	Ser	Cys	Gln	Ile	Lys	Val	Phe	Lys	Pro	Lys	Gly	His	Leu	His	Ser	Ala	Ser	Cys	Gln	Ile	Lys	Val	Phe	Lys	Pro	Lys	Gly
210															215															220																	
Ala	Asp	Arg	Lys	Gln	Lys	Thr	Asp	Arg	Glu	Lys	Met	Glu	Lys	Arg	Thr	Ala	Asp	Arg	Lys	Gln	Lys	Thr	Asp	Arg	Glu	Lys	Met	Glu	Lys	Arg	Thr	Ala	Asp	Arg	Lys	Gln	Lys	Thr	Asp	Arg	Glu	Lys	Met	Glu	Lys	Arg	Thr
225															230															235																	
Ala	His	Glu	Lys	Glu	Lys	Tyr	Gln	Pro	Ser	Tyr	Asp	Thr	Thr	Ile	Leu	Ala	His	Glu	Lys	Glu	Lys	Tyr	Gln	Pro	Ser	Tyr	Asp	Thr	Thr	Ile	Leu	Ala	His	Glu	Lys	Glu	Lys	Tyr	Gln	Pro	Ser	Tyr	Asp	Thr	Thr	Ile	Leu
245															250															255																	
Thr	Glu	Met	Arg	Leu	Glu	Pro	Ile	Ile	Glu	Asp	Ala	Val	Glu	His	Glu	Thr	Glu	Met	Arg	Leu	Glu	Pro	Ile	Ile	Glu	Asp	Ala	Val	Glu	His	Glu	Thr	Glu	Met	Arg	Leu	Glu	Pro	Ile	Ile	Glu	Asp	Ala	Val	Glu	His	Glu
260															265															270																	
Gln	Lys	Xaa	Val	Gln	Gln	Ala	Asp	Phe	Ala	Ala	Asp	Tyr	Gly	Asp	Ser	Gln	Lys	Xaa	Val	Gln	Gln	Ala	Asp	Phe	Ala	Ala	Asp	Tyr	Gly	Asp	Ser	Gln	Lys	Xaa	Val	Gln	Gln	Ala	Asp	Phe	Ala	Ala	Asp	Tyr	Gly	Asp	Ser
275															280															285																	
Leu	Ala	Lys	Arg	Gly	Ser	Cys	Ser	Pro	Trp	Pro	Asp	Ala	Pro	Thr	Ala	Leu	Ala	Lys	Arg	Gly	Ser	Cys	Ser	Pro	Trp	Pro	Asp	Ala	Pro	Thr	Ala	Leu	Ala	Lys	Arg	Gly	Ser	Cys	Ser	Pro	Trp	Pro	Asp	Ala	Pro	Thr	Ala
290															295															300																	
Tyr	Val	Asn	Asn	Ser	Pro	Ser	Pro	Ala	Pro	Thr	Phe	Thr	Ser	Pro	Gln	Tyr	Val	Asn	Asn	S																											

<210> 1785

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca
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 actagcggca acacaggcat tggactggcc tttatggctg ctgccaaggg ctacaaactt
 120
 acactcacia tgctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggt
 180
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa
 240
 gagatacaag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac
 300
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt
 360
 gatggccttg tatctggtat c
 381

<210> 1786

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1786

Ile	Thr	Asp	Ala	Glu	Glu	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1				5				10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
			20				25					30			
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
		35				40					45				
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50				55				60						
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65				70				75						80	
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
			85				90							95	
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
		100					105						110		
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
		115					120						125		

<210> 1787

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaaag atttaattgt
 60
 agggtcacct aacaaggaga tgagaacaaa ctttaaactct atctctctaa ggaatttgga
 120
 cttcggggttt ttaagggttta gaatgggcca aaacatggac attattgatt ggtcaaagag
 180

tacaggggtca tggaacctgg agatgaaaaa gccatattct catgctgac ctgttcctct
 240
 gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg
 294

<210> 1788
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1788
 Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser
 1 5 10 15
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn
 20 25 30
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile
 35 40 45
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys
 50 55 60
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu
 65 70 75 80
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu
 85 90

<210> 1789
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 1789
 ttccacata caccacgcg gcatgtcctg acagagatgc acacccttag cacatattca
 60
 cacacacaga catgccacac cccgccatcc cccacactc gtacacgccc accaccctc
 120
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc
 180
 gacctgtcc cccgggtctc tcccgcaggc aggtctctc gccgagtctc cgaaaagggg
 240
 cggtcgtggc ggccctggcg cccagctggg caacgcttcg tggatatctca ccgcttctct
 300
 ctgttgtgcc cagcgccccg actgaagatc cggatcttca gtccttggcg cgc
 353

<210> 1790
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1790
 Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro
 1 5 10 15
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His
 20 25 30
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala


```

          35              40              45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
  50              55              60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
  65              70              75              80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
          85              90              95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
          100              105

```

<210> 1791
 <211> 355
 <212> DNA
 <213> Homo sapiens

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<400> 1791
aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag
 60
acccccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt
 120
gctttgcatc aagccaatgc atgtatcccc taacacaccc atgctttatg tggtcctgc
 180
ccctccctgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatag
 240
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgtctgt atctgtatct
 300
ccactccgat tccattccc tctgtctctc tctctctct cctcccttca cgcgt
 355

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<210> 1792
 <211> 108
 <212> PRT
 <213> Homo sapiens

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<400> 1792
Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
 1              5              10              15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
          20              25              30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
          35              40              45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
          50              55              60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
 65              70              75              80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
          85              90              95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
          100              105

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<210> 1793
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 1793

tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca cacccatata
 60
 caccctctcg gagctcctcg cttaccagtc gcccaaagag cttgtccccc cagcagccag
 120
 agtcagccag acccttagca aacaccatag gggatcatctc aatctcttct ccaacttcac
 180
 cttcttctct ggagatgaat cctgacaaca cctcagggct gaggcagaag tcggtggagg
 240
 ccgagccgtg ctcattgtgg atgggtgcacc gatacacacc gcagtctacg ggggaggcct
 300
 gcacgatggc caaggccgcc ggccctcat cccctgcgt cctgcccacc tcgcccactg
 360
 ggcgtgatc cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc
 420
 acagcttcag gctaccggag gcatacaggaa actgctccac ccgaatcttc cggatcacct
 480
 gtggggcttt cagcaggtct ttggctttcc
 510

<210> 1794

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1794

Met	Thr	Leu	Ala	Trp	Glu	Ala	Phe	Arg	Arg	Pro	His	Pro	Tyr	Pro	Pro
1				5					10					15	
Pro	Arg	Ser	Ser	Ser	Leu	Thr	Ser	Arg	Pro	Lys	Ser	Leu	Ser	Pro	Gln
			20					25					30		
Gln	Pro	Glu	Ser	Ala	Arg	Pro	Leu	Ala	Asn	Thr	Ile	Gly	Val	Ile	Ser
			35				40					45			
Ile	Ser	Ser	Pro	Thr	Ser	Pro	Ser	Ser	Leu	Glu	Met	Asn	Pro	Asp	Asn
			50			55					60				
Thr	Ser	Gly	Leu	Arg	Gln	Lys	Ser	Val	Glu	Ala	Glu	Pro	Cys	Ser	Leu
65					70				75					80	
Trp	Met	Val	His	Arg	Tyr	Thr	Pro	Gln	Ser	Thr	Gly	Glu	Ala	Cys	Thr
			85					90						95	
Met	Ala	Lys	Ala	Ala	Gly	Pro	Ser	Ser	Pro	Ala	Leu	Leu	Pro	Thr	Ser
			100					105					110		
Pro	Thr	Gly	Arg												
			115												

<210> 1795

<211> 386

<212> DNA

<213> Homo sapiens

<400> 1795

ctatgctctg agtcacttct ccaagcattc ctttctgttc ttccttcctt gggctgatca
 60
 tttcaagaag tcctacattc cagaaaactt gagaggtgct tcttctctgg aagccctttt
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttgc
 180
 taattatcaa tctttccata taaacagtaa aggaccacag tttattcatc agattcccca
 240
 tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggg
 300
 tctccaggtt gagagctcca tgagggcacc aatttttgtc tgttttagctg tgtcctcaaa
 360
 gcaaggaagg gttgatccgg tctaga
 386

<210> 1796
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 1796
 Met Gln Val Gln Val Trp Met Gly Asn Leu Met Asn Lys Leu Trp Ser
 1 5 10 15
 Phe Thr Val Tyr Met Glu Arg Leu Ile Ile Lys Gln Lys Ile Ala Asp
 20 25 30
 Thr Ala Glu Val Cys Arg Met Leu Pro Glu Leu Thr Glu Lys Lys Arg
 35 40 45
 Gly Phe Gln Arg Arg Ser Thr Ser Gln Val Phe Trp Asn Val Gly Leu
 50 55 60
 Leu Glu Met Ile Ser Pro Gly Lys Glu Glu Gln Lys Gly Met Leu Gly
 65 70 75 80
 Glu Val Thr Gln Ser Ile
 85

<210> 1797
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 1797
 aagcttcact atgttgccca ttccatgggc ggcgtgctgg tgcgtgacct gctggcggac
 60
 cggaatttgc cgatgtcatt gatcaggtca tctgtctggg ctgcgcgcag cagggctcgc
 120
 gtgccgctaa tttgttggcg ccatttgctg gcggcgcac cgtcaaattg tgtatcacag
 180
 cgactatgtg atgccgcttg cgcccacgcc cggcagcgcg cgttggagcg ccatcaactc
 240
 acagatggac aacctggtgt tgccggtgac ctcggcaatt ttaccgggaa tgacccatgt
 300
 ggcggtggat tacctggggc attgttcgtt attgtacagc ccacgcgt
 348

<210> 1798
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1           5           10           15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
          20           25           30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
          35           40           45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
          50           55           60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
65           70           75           80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
          85           90           95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
          100           105

```

<210> 1799

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1799

```

acgcgctgcc tcctgctggt cgggatttttc cttgctgtag ttaaccaaac caccggcgctc
60
aataccgtca tgtattacgc gcccaagggtg ttggagttcg caggaatgag caccagggcg
120
tcgattatatt cagaggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tggctcatcg aacggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggt
240
gtgtgtctcc ttggtattgc ggetactttc gggctggcaa ttgctcctca tgtgggtcaa
300
ggggtaccga agtgggcgcc tattctcgtg ctgctcctga tgagtatctt catgcttattc
360
gtgcac
366

```

<210> 1800

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1800

```

Thr Arg Arg Leu Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1           5           10           15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
          20           25           30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
          35           40           45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
          50           55           60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
65           70           75           80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```



```

      115              120              125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
      130              135              140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
145              150              155              160
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
      165              170              175
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
      180              185              190
Asp Asp Asp Val Arg Leu Arg
      195

```

<210> 1803

<211> 708

<212> DNA

<213> Homo sapiens

<400> 1803

```

cccacaacga tggccgcat ggtggatggg gaagtgcctg aggaggtcac acctaaggac
60
ctcatcctgg ccctcatctc cgagatcggc accggtgggg gacaagggtca tatggtcgag
120
tatcgcgggc aggccatcga gaagatgtcg atggaggggc gcatgacgat ctgcaatatg
180
tcgattgagt ggggagctcg cgtcggcatg gttgcttctg atgagaccac cttcacctac
240
ctcaaggatc gtccgcacgc tccgcgtggt gcacagtggg acaaggctgt cgcgtactgg
300
cgcaactctgc gtactgacga cgatgcgacc tttgacgctg agatccatgt ggacgcctcg
360
aatctcgccc ctttcgttac ctgggggtacc aaccgggggc agggatcccc ctaggcgggt
420
gtggtgccgg ccgtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttgaggta
480
catggatttg accccgacga gatcggttcc cggtttgctg acatctttcg caataactct
540
gcgaacaacg gcttgttact ggctcagggt gatcccaagg tcgtcggaga gttgtgggac
600
tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
660
cttcggggtc gcacgaccta cccgttccat attgatgacg tcacgcgt
708

```

<210> 1804

<211> 236

<212> PRT

<213> Homo sapiens

<400> 1804

```

Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
1              5              10              15
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
20              25              30
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

```


		35					40					45				
Met	Ser	Met	Glu	Gly	Arg	Met	Thr	Ile	Cys	Asn	Met	Ser	Ile	Glu	Trp	
	50					55					60					
Gly	Ala	Arg	Val	Gly	Met	Val	Ala	Ser	Asp	Glu	Thr	Thr	Phe	Thr	Tyr	
65					70					75					80	
Leu	Lys	Asp	Arg	Pro	His	Ala	Pro	Arg	Gly	Ala	Gln	Trp	Asp	Lys	Ala	
				85					90					95		
Val	Ala	Tyr	Trp	Arg	Thr	Leu	Arg	Thr	Asp	Asp	Asp	Ala	Thr	Phe	Asp	
			100					105					110			
Ala	Glu	Ile	His	Val	Asp	Ala	Ser	Asn	Leu	Ala	Pro	Phe	Val	Thr	Trp	
		115					120					125				
Gly	Thr	Asn	Pro	Gly	Gln	Gly	Ser	Pro	Leu	Gly	Gly	Val	Val	Pro	Ala	
	130					135				140						
Val	Glu	Asp	Phe	Glu	Asp	Glu	Val	Ala	Arg	Ser	Ala	Ala	Phe	Gly	Val	
145					150					155					160	
His	Gly	Phe	Asp	Pro	Asp	Glu	Ile	Gly	Ser	Arg	Phe	Ala	Asp	Ile	Phe	
			165						170					175		
Arg	Asn	Asn	Ser	Ala	Asn	Asn	Gly	Leu	Leu	Leu	Ala	Gln	Val	Asp	Pro	
			180					185					190			
Lys	Val	Val	Gly	Glu	Leu	Trp	Asp	Phe	Ala	Glu	Gln	His	Pro	Gly	Glu	
		195					200					205				
Gln	Leu	Thr	Leu	Ser	Leu	Glu	Asn	Arg	Thr	Ile	Asn	Leu	Pro	Gly	Arg	
	210					215					220					
Thr	Thr	Tyr	Pro	Phe	His	Ile	Asp	Asp	Val	Thr	Arg					
225					230					235						

<210> 1805

<211> 833

<212> DNA

<213> Homo sapiens

<400> 1805

nccgcagtgg tgtgggacaa gaacaccggt gagccggttt ataacgccat cgtgtggcag
60

gacacgcgca ctcaaaagat ctgtaacgaa ctagctggtg acaagggcgc cgaccgctac
120

180 aaggagatct gtggctctggg cctgtcgacc tatttctctg gccccaaggt caaatggatt

ctcgacaacg ttgagggagc cegtgcgagg gccgaggccg gcgatctgct cttcggtaac
240

atggacactt gggtgctgtg gaacctgact ggcggtacta acgggtggcgt gcacatcacc
300

gatccgacca acgcgtcccg aaccatgctc atggacgtcc gaaagctgca gtgggacgac
360

tcgatgtgcg aggtcatggg aattccaaag tccatgcttc ctgagatcaa gtctctctcc
420

gagatctacg gctatggtcg caagaacggc ctgctgatcg ataccccgat ctccggcatt
480

cttggcgatc agcaggccgc cacctttggc caggcttgct tccaaaaggg catggcgaag
540

aacacgtacg gcaccggctg cttcatgctc atgaacacag gtgaggaggc catcttctcc
600

gagaacggtc tgctgaccac cgtctgctac aagattggtg accagcccac cgtctatgcc
660

ctggaagggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgca caacctcaag
 720
 atgttcgaga ccgccccgca aatcgaagcc ctgcgaaca ccgtcgagga caatggtggc
 780
 gctactttg tgccggcctt ctctggcctg ttgcgcgcgt actggcgctcc gga
 833

<210> 1806

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1806

Xaa	Ala	Val	Val	Trp	Asp	Lys	Asn	Thr	Gly	Glu	Pro	Val	Tyr	Asn	Ala
1			5						10					15	
Ile	Val	Trp	Gln	Asp	Thr	Arg	Thr	Gln	Lys	Ile	Cys	Asn	Glu	Leu	Ala
			20					25					30		
Gly	Asp	Lys	Gly	Ala	Asp	Arg	Tyr	Lys	Glu	Ile	Cys	Gly	Leu	Gly	Leu
		35					40					45			
Ser	Thr	Tyr	Phe	Ser	Gly	Pro	Lys	Val	Lys	Trp	Ile	Leu	Asp	Asn	Val
		50				55					60				
Glu	Gly	Ala	Arg	Ala	Arg	Ala	Glu	Ala	Gly	Asp	Leu	Leu	Phe	Gly	Asn
65					70					75				80	
Met	Asp	Thr	Trp	Val	Leu	Trp	Asn	Leu	Thr	Gly	Gly	Thr	Asn	Gly	Gly
			85						90				95		
Val	His	Ile	Thr	Asp	Pro	Thr	Asn	Ala	Ser	Arg	Thr	Met	Leu	Met	Asp
			100					105				110			
Val	Arg	Lys	Leu	Gln	Trp	Asp	Asp	Ser	Met	Cys	Glu	Val	Met	Gly	Ile
		115					120					125			
Pro	Lys	Ser	Met	Leu	Pro	Glu	Ile	Lys	Ser	Ser	Ser	Glu	Ile	Tyr	Gly
		130				135						140			
Tyr	Gly	Arg	Lys	Asn	Gly	Leu	Leu	Ile	Asp	Thr	Pro	Ile	Ser	Gly	Ile
145					150					155				160	
Leu	Gly	Asp	Gln	Gln	Ala	Ala	Thr	Phe	Gly	Gln	Ala	Cys	Phe	Gln	Lys
			165						170					175	
Gly	Met	Ala	Lys	Asn	Thr	Tyr	Gly	Thr	Gly	Cys	Phe	Met	Leu	Met	Asn
			180					185					190		
Thr	Gly	Glu	Glu	Ala	Ile	Phe	Ser	Glu	Asn	Gly	Leu	Leu	Thr	Thr	Val
		195					200					205			
Cys	Tyr	Lys	Ile	Gly	Asp	Gln	Pro	Thr	Val	Tyr	Ala	Leu	Glu	Gly	Ser
	210					215					220				
Ile	Ala	Val	Ala	Gly	Ser	Leu	Val	Gln	Trp	Leu	Arg	Asp	Asn	Leu	Lys
225					230					235				240	
Met	Phe	Glu	Thr	Ala	Pro	Gln	Ile	Glu	Ala	Leu	Ala	Asn	Thr	Val	Glu
			245						250					255	
Asp	Asn	Gly	Gly	Ala	Tyr	Phe	Val	Pro	Ala	Phe	Ser	Gly	Leu	Phe	Ala
		260						265					270		
Pro	Tyr	Trp	Arg	Pro											
		275													

<210> 1807

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1807

nmntatcggc aaggtggctc aaatggctct tgactatgtc aacggtgaca cgtgcgccgc
 60
 gaccgccccca ttcatttgtc gtttgacgtc gacgcgatgg accctagcgt ggccccgagc
 120
 acaggcacac cgggtgcgtgg tgggtctcaca ttccgagaag gccactacat atgcgagggc
 180
 gtagctgaga ccggctcgtt ggtggctatg gatatggtag aagtcaaccc ccatcttgaa
 240
 aagcatgcgg ctgagcagac gatcgccgtg ggttgttccc tcattcgttc ggcgctgggg
 300
 gagacgcttc tgtaatgggt gcatgatggg ccgggtgtcc atagccatgc atagacactc
 360
 cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcggtttt gagcacgcgt
 420

<210> 1808

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1808

His	Val	Arg	Arg	Asp	Arg	Pro	Ile	His	Leu	Ser	Phe	Asp	Val	Asp	Ala
1				5					10					15	
Met	Asp	Pro	Ser	Val	Ala	Pro	Ser	Thr	Gly	Thr	Pro	Val	Arg	Gly	Gly
			20					25					30		
Leu	Thr	Phe	Arg	Glu	Gly	His	Tyr	Ile	Cys	Glu	Ala	Val	Ala	Glu	Thr
		35				40						45			
Gly	Ser	Leu	Val	Ala	Met	Asp	Met	Val	Glu	Val	Asn	Pro	His	Leu	Glu
	50					55					60				
Lys	His	Ala	Ala	Glu	Gln	Thr	Ile	Ala	Val	Gly	Cys	Ser	Leu	Ile	Arg
65					70					75					80
Ser	Ala	Leu	Gly	Glu	Thr	Leu	Leu								
						85									

<210> 1809

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1809

nnaccggtga tcgcatcggc gagcctcggc gcgatgcgcg tgttcgacct tcgccatcgc
 60
 cagaccggtg tcacgcatgc gtatgcctc gggcatggca gcctcctcgt gatgcggggc
 120
 cccaccagg ccgaatggca gcatcgctg ccgaaagcgc cgggtgtgca gggcgagcgc
 180
 gtgaacctga cgtttcggcg cgtgatgccg gtcggatatg gccggtaaca accggcgctc
 240
 ccgaggtgcc cggatcgccg ggcgattcgc gcccgtttt cgcgattcat gcgcgatcga
 300
 tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn
 340


```
<210> 1810
<211> 75
<212> PRT
<213> Homo sapiens
```

<400> 1810															
Xaa	Pro	Val	Ile	Ala	Ser	Val	Ser	Leu	Gly	Ala	Met	Arg	Val	Phe	Asp
1				5					10					15	
Leu	Arg	His	Arg	Gln	Thr	Gly	Val	Thr	His	Ala	Tyr	Arg	Leu	Gly	His
			20					25					30		
Gly	Ser	Leu	Leu	Val	Met	Arg	Gly	Pro	Thr	Gln	Ala	Glu	Trp	Gln	His
		35					40					45			
Arg	Val	Pro	Lys	Ala	Pro	Gly	Val	Gln	Gly	Glu	Arg	Val	Asn	Leu	Thr
	50					55					60				
Phe	Arg	Arg	Val	Met	Pro	Val	Gly	Met	Gly	Arg					
65					70				75						

```
<210> 1811
<211> 500
<212> DNA
<213> Homo sapiens
```

```
<400> 1811
nnacgcgtgc taggaatagc catggactca tcatcagata catgctggat ttataacttca
60
ctgggtggat tgtatgagct gtcgtaaaa gatgaggctc gcgatatgtg gcatttgttg
120
ctgaaacggg gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag
180
cagggtactgg aaaagaaggg cgatgcactg ctacacgcag gtcagctcat ggaggccgtc
240
gagtgtctatg ctcaggccca gacaccggcc tttgaacagg ttgtgctttc tttgatggac
300
gtctgtgccg acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa
360
caagctcgcg tgcttcgtct catgctggct acttggctca ttgaattgta tgtggccgcc
420
attcaagcgc atgaaccac ctccgaacat tatcagacac ttttgctgga agcccaggag
480
acacttgagc ggcattcatga
500
```

```
<210> 1812
<211> 166
<212> PRT
<213> Homo sapiens
```

```

<400> 1812
Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp
 1             5             10             15
Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu
      20             25             30
Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

```


35	40	45
Ala Leu Thr Phe Cys Arg	Asp Glu Thr Cys Arg	Lys Gln Val Leu Glu
50	55	60
Lys Lys Gly Asp Ala Leu	Leu His Ala Gly Gln	Leu Met Glu Ala Val
65	70	75
Glu Cys Tyr Ala Gln Ala	Gln Thr Pro Ala Phe	Glu Gln Val Val Leu
85	90	95
Ser Leu Met Asp Val Cys	Ala Asp Lys Ala Leu	Arg Arg Tyr Val Arg
100	105	110
Leu Arg Leu Asp Lys Met	Pro Lys Gln Ala Arg	Val Pro Arg Leu Met
115	120	125
Leu Ala Thr Trp Leu Ile	Glu Leu Tyr Val Ala	Ala Ile Gln Ala His
130	135	140
Glu Pro Thr Ser Glu His	Tyr Gln Thr Leu Leu	Leu Glu Ala Gln Glu
145	150	155
Thr Leu Glu Arg His His		160
165		

<210> 1813

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1813

tctagagccg ttgtgatcgg tatccatggt tggatggggg tcatctcgat ggaggagtgt
60
gtcctgaggg gtggcagtga cctggtaggg gtgcctgcgg cgtcgcggct tgcgatcgct
120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatttt tgcgttggtg
240
aataaggttt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
300
ccgctgtaga tcttcctat ggtcattctg gggccaggcg cttcgccagc tggccatcgc
360
aacaatggtg tggcgaaggg ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
420
tctaca
426

<210> 1814

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1814

Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
1 5 10 15
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
20 25 30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
35 40 45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser


```

      50              55              60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65              70              75              80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85              90              95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100              105

```

<210> 1815
 <211> 303
 <212> DNA
 <213> Homo sapiens

```

<400> 1815
ggcgcccaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggatacag
60
cgccaggccg cgcatactcgg catggagcgc gatcagttcg gccatcatcg cgtcgtcggg
120
cgtgccgata tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
180
ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
240
ccggttccag cagtgaaca cgttcgcctc gggcagacgg gcggcatcgg cgatacaggt
300
acc
303

```

<210> 1816
 <211> 98
 <212> PRT
 <213> Homo sapiens

```

<400> 1816
Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
1              5              10              15
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
      20              25              30
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
      35              40              45
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
      50              55              60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65              70              75              80
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
      85              90              95
Gly Thr

```

<210> 1817
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 1817

nncagcttgc aagaccgcgg ccacacagtg tacatcttaa catcacattt cgatgcgtcg
 60
 catgcgtttg agcccacacg cgatggcaca cttcaggtca ttcacgcaaa gacatggatc
 120
 ccgcgtcctt tatttcacat gctgcatctg cgatggccat tcgcagcagt tttttctctt
 180
 gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg cagccactt gccgcatgtg
 240
 tacagggcgt gacgcatgtc ccgtcaaact cgtcccaga cgtgtttgtt attgaccaac
 300
 ttccagcagc gataccccta atcaaactcc tgtgtgggcg gcgtgtcatg tactactgtc
 360
 attccctga caaagaaatc agcgtgtgtc tggctcgaca gcgaggcacg cgt
 413

<210> 1818

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1818

Xaa	Ser	Leu	Gln	Asp	Arg	Gly	His	Thr	Val	Tyr	Ile	Leu	Thr	Ser	His
1			5						10					15	
Phe	Asp	Ala	Ser	His	Ala	Phe	Glu	Pro	Thr	Arg	Asp	Gly	Thr	Leu	Gln
			20						25				30		
Val	Ile	His	Ala	Lys	Thr	Trp	Ile	Pro	Arg	Ser	Leu	Phe	His	Met	Leu
		35					40					45			
His	Leu	Arg	Trp	Pro	Phe	Ala	Ala	Val	Phe	Ser	Leu	Val	Met	Gln	Val
	50					55					60				
Val	Val	Ala	Ala	Tyr	Gly	Ser	Ser	Leu	Ala	Arg	His	Leu	Pro	His	Val
65					70					75				80	
Tyr	Arg	Ala													

<210> 1819

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1819

ggatccaaga gtggggcatc aggaacatgc catggttgctc gtggtgctgg aatgagaaca
 60
 atcacaagac agataggcct tggcatgatc caacagatga aactgtttg ccctgaatgc
 120
 aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaaacaaa
 180
 gtagtccagg agaagaaggt gttagagggt catgtggaga aaggaatgca acataaccaa
 240
 aagattgtat tccagggtca ggctgatgaa gctcctgata cgggtacagg agacattgtt
 300
 tttgtcttgc aacttaaaga ccatccaaaa tttaagagga tgt
 343

<210> 1820

<211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1820
 Gly Ser Lys Ser Gly Ala Ser Gly Thr Cys His Gly Cys Arg Gly Ala
 1 5 10 15
 Gly Met Arg Thr Ile Thr Arg Gln Ile Gly Leu Gly Met Ile Gln Gln
 20 25 30
 Met Asn Thr Val Cys Pro Glu Cys Lys Gly Ser Gly Glu Ile Ile Ser
 35 40 45
 Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu
 50 55 60
 Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln
 65 70 75 80
 Lys Ile Val Phe Gly Gly Gln Ala Asp Glu Ala Pro Asp Thr Gly Thr
 85 90 95
 Gly Asp Ile Val Phe Val Leu Gln Leu Lys Asp His Pro Lys Phe Lys
 100 105 110
 Arg Met

<210> 1821
 <211> 285
 <212> DNA
 <213> Homo sapiens

<400> 1821
 aagcttgagt tcagcaagat cttggaggct attaaggcaa acttcaacga caagttcgat
 60
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<210> 1822
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 1822
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 Asp Lys Phe Asp Glu Val Gly Lys Lys Trp Gly Gly Gly Ile Met Gly
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 35 40 45
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<210> 1823
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 1823
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 387

<210> 1824
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1824
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 Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln
 35 40 45
 Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr
 50 55 60
 His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro
 65 70 75 80
 Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu
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 Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp
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<210> 1825
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 1825
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 413

<210> 1826

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1826

Met	Gly	Arg	Arg	Arg	Cys	Val	Cys	Val	His	Thr	Ala	Ala	Leu	Ala	Gly
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			20				25				30				
Trp	Ala	Pro	Arg	His	His	Val	Ala	Gly	Arg	His	Gly	His	Val	Gly	Val
			35				40				45				
Val	Pro	Arg	Tyr	Ala	Arg	Pro	Phe	Leu	Leu	Ser	Val	Gly	Leu	Val	Cys
			50				55				60				
Leu	Glu	Arg	Asp	Ala	Trp	Pro	Thr	Gly	Thr	Arg	Cys	Ile	Gly	Gly	Leu
65					70					75					80
Pro	Val	Gly	His	Ala	Ala	Gly	Ser	Gly	Leu	Arg	Cys	Val	Ala	Asp	Pro
				85					90					95	
Arg	Ala	Ser	Leu	Gly	Val	Met	Cys	Leu	Pro	Ala	Pro	Met	Pro	Phe	Ile
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<210> 1827

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1827

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 180
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 240
 aagtgaacc gcgccagcaa ccagaccctg cgtccgggca acgtgatcca cctgtccaac
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 345

<210> 1828
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1828
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 Gln Glu Trp Ser Leu Phe Asp Pro Arg Val Val Pro Glu Phe Thr Asp
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 Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln
 35 40 45
 Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met
 50 55 60
 Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp
 65 70 75 80
 Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile
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 His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp
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 Glu Thr Ala
 115

<210> 1829
 <211> 4457
 <212> DNA
 <213> Homo sapiens

<400> 1829
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 420
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 720

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<210> 1830

<211> 1377

<212> PRT

<213> Homo sapiens

<400> 1830

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		20						25					30		
Asn	Leu	Ser	Tyr	Glu	Val	Asp	Pro	Glu	Thr	Val	Asn	Ala	Gln	Glu	Asp
		35					40					45			
Ser	Gln	Met	Pro	Lys	Glu	Ser	Ser	Pro	Asp	Asp	Asp	Val	Gln	Gln	Val
		50				55				60					
Val	Phe	Asp	Leu	Ile	Cys	Lys	Val	Val	Ser	Gly	Leu	Glu	Val	Glu	Ser
65					70					75				80	
Ala	Ser	Val	Thr	Ser	Gln	Leu	Glu	Ile	Glu	Ala	Met	Pro	Pro	Lys	Cys
				85					90					95	
Ser	Asp	Ile	Asp	Pro	Asp	Glu	Glu	Thr	Ile	Lys	Ile	Glu	Asp	Asp	Ser
		100						105					110		
Ile	Arg	Gln	Ser	Gln	Asn	Ala	Leu	Leu	Ser	Asn	Glu	Ser	Ser	Gln	Phe
	115					120						125			
Leu	Ser	Val	Ser	Ala	Glu	Gly	Gly	His	Glu	Cys	Val	Ala	Asn	Gly	Ile
	130					135					140				
Ser	Arg	Asn	Ser	Ser	Ser	Pro	Cys	Ile	Ser	Gly	Thr	Thr	His	Thr	Leu
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His	Asp	Ser	Ser	Val	Ala	Ser	Ile	Glu	Thr	Lys	Ser	Arg	Gln	Arg	Ser
				165					170					175	
His	Ser	Ser	Ile	Gln	Phe	Ser	Phe	Lys	Glu	Lys	Leu	Ser	Glu	Lys	Val
			180					185					190		
Ser	Glu	Lys	Glu	Thr	Ile	Val	Lys	Glu	Ser	Gly	Lys	Gln	Pro	Gly	Ala
	195						200					205			
Lys	Pro	Lys	Val	Lys	Leu	Ala	Arg	Lys	Lys	Asp	Asp	Asp	Lys	Lys	Lys
	210					215					220				
Ser	Ser	Asn	Glu	Lys	Leu	Lys	Gln	Thr	Ser	Val	Phe	Phe	Ser	Asp	Gly

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Leu	Asp	Leu	Glu	Asn	Trp	Tyr	Ser	Cys	Gly	Glu	Gly	Asp	Ile	Ser	Glu
				245					250					255	
Ile	Glu	Ser	Asp	Met	Gly	Ser	Pro	Gly	Ser	Arg	Lys	Ser	Pro	Asn	Phe
			260					265				270			
Asn	Ile	His	Pro	Leu	Tyr	Gln	His	Val	Leu	Leu	Tyr	Leu	Gln	Leu	Tyr
		275					280				285				
Asp	Ser	Ser	Arg	Thr	Leu	Tyr	Ala	Phe	Ser	Ala	Ile	Lys	Ala	Ile	Leu
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Lys	Thr	Asn	Pro	Ile	Ala	Phe	Val	Asn	Ala	Ile	Ser	Thr	Thr	Ser	Val
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Asn	Asn	Ala	Tyr	Thr	Pro	Gln	Leu	Ser	Leu	Leu	Gln	Asn	Leu	Leu	Ala
			325					330					335		
Arg	His	Arg	Ile	Ser	Val	Met	Gly	Lys	Asp	Phe	Tyr	Ser	His	Ile	Pro
		340					345					350			
Val	Asp	Ser	Asn	His	Asn	Phe	Arg	Ser	Ser	Met	Tyr	Ile	Glu	Ile	Leu
	355					360					365				
Ile	Ser	Leu	Cys	Leu	Tyr	Tyr	Met	Arg	Ser	His	Tyr	Pro	Thr	His	Val
	370				375					380					
Lys	Val	Thr	Ala	Gln	Asp	Leu	Ile	Gly	Asn	Arg	Asn	Met	Gln	Met	Met
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Ser	Ile	Glu	Ile	Leu	Thr	Leu	Leu	Phe	Thr	Glu	Leu	Ala	Lys	Val	Ile
			405					410					415		
Glu	Ser	Ser	Ala	Lys	Gly	Phe	Pro	Ser	Phe	Ile	Ser	Asp	Met	Leu	Ser
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Lys	Cys	Lys	Val	Gln	Lys	Val	Ile	Leu	His	Cys	Leu	Leu	Ser	Ser	Ile
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Phe	Ser	Ala	Gln	Lys	Trp	His	Ser	Glu	Lys	Met	Ala	Gly	Lys	Asn	Leu
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Glu	Asp	Glu	Phe	Asp	Asn	Gly	Ser	Thr	Leu	Gln	Ser	Gln	Leu	Leu	Lys
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Val	Leu	Gln	Arg	Leu	Ile	Val	Leu	Glu	His	Arg	Val	Met	Thr	Ile	Pro
		500					505					510			
Glu	Glu	Asn	Glu	Thr	Gly	Phe	Asp	Phe	Val	Val	Ser	Asp	Leu	Glu	His
		515					520				525				
Ile	Ser	Pro	His	Gln	Pro	Met	Thr	Ser	Leu	Gln	Tyr	Leu	His	Ala	Gln
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Pro	Ile	Thr	Cys	Gln	Gly	Met	Phe	Leu	Cys	Ala	Val	Ile	Arg	Ala	Leu
545				550					555					560	
His	Gln	His	Cys	Ala	Cys	Lys	Met	His	Pro	Gln	Trp	Ile	Gly	Leu	Ile
			565					570					575		
Thr	Ser	Thr	Leu	Pro	Tyr	Met	Gly	Lys	Val	Leu	Gln	Arg	Val	Val	Val
		580					585					590			
Ser	Val	Thr	Leu	Gln	Leu	Cys	Arg	Asn	Leu	Asp	Asn	Leu	Ile	Gln	Gln
	595						600				605				
Tyr	Lys	Tyr	Glu	Thr	Gly	Leu	Ser	Asp	Ser	Arg	Pro	Leu	Trp	Met	Ala
	610				615					620					
Ser	Ile	Ile	Pro	Pro	Asp	Met	Ile	Leu	Thr	Leu	Leu	Glu	Gly	Ile	Thr
625				630					635					640	
Ala	Ile	Ile	His	Tyr	Cys	Leu	Leu	Asp	Pro	Thr	Thr	Gln	Tyr	His	Gln
			645					650					655		
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 1125 1130 1135
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 1140 1145 1150
 Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln
 1155 1160 1165
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 Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala Cys Lys Phe
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 1220 1225 1230
 Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu
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 Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val
 1250 1255 1260
 Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys Asn Pro Glu
 1265 1270 1275 1280
 Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly His Leu Leu
 1285 1290 1295
 Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe
 1300 1305 1310
 Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly
 1315 1320 1325
 Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys
 1330 1335 1340
 Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln
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<210> 1831

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1831

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<210> 1832

<211> 169

<212> PRT

<213> Homo sapiens

<400> 1832

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Phe	Val	Arg	Glu	Ala	Val	Cys	Pro	Pro	Gly	Lys	Ser	Lys	Val	Asp	Tyr
		20					25						30		
Tyr	Asp	Asn	Ala	Leu	Lys	Gly	Phe	Ile	Leu	Glu	Ala	Arg	Pro	Ser	Gly
		35				40						45			
Gly	Lys	Thr	Phe	Tyr	Leu	Arg	Tyr	His	Asp	Ser	His	Gly	Lys	Leu	Arg
	50				55						60				
Gln	Cys	Lys	Ile	Gly	Asp	Ala	Ala	Ala	Val	Ser	Tyr	Asp	Lys	Ala	Arg
65				70						75					80
Gln	Lys	Ala	Met	Arg	Leu	Arg	Trp	Lys	Val	Glu	Trp	Gly	Gly	Asn	Pro
			85						90					95	
Leu	Glu	Glu	Arg	Gln	Ala	Leu	Arg	Ala	Val	Pro	Thr	Leu	Ala	Glu	Phe
		100						105					110		
Ile	Arg	Glu	Thr	Tyr	Val	Pro	His	Ile	His	Leu	His	Arg	Arg	Asn	Phe
	115						120					125			
Gln	Ser	Thr	Leu	Ser	Phe	Leu	Lys	Cys	His	Val	Leu	Pro	Arg	Phe	Gly
	130					135					140				
Ala	Lys	His	Leu	Asp	Glu	Ile	Thr	Thr	Asn	Met	Leu	Ala	Glu	Ala	His
145				150						155					160
Gln	Asp	Leu	Arg	Thr	Lys	Gly	Tyr	Ala							
				165											

<210> 1833

<211> 430

<212> DNA

<213> Homo sapiens

<400> 1833

acgcgtgcga tgttgaagga gcgcttcggc atcgggcatg cgacgctgca gggtgaactg
 60
 tccggtgccg aggcagacga tgccgaggcg ggcggctgct aagggtcgcc gtcgttcagt
 120
 ggcgcaaagc ggcgatgata gcgtcgaaca gcgttactcc agccagcggg ccaaccaaca
 180
 gcatcaccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttgga
 240
 gcggcttggg ctgcgcttcc cagcgttccg gcggcgccga gccatttttg aaatcgacga
 300

acatctccgg cgctcctgct gtcaggcgct gaaggatcg aaagtcatgc gccgtgacaa
 360
 aggaagatcg gcgacacagg agccgaagcg ccgccgctg caataagcgc gcgcgatcgc
 420
 aattgtcggg
 430

<210> 1834
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 1834
 Met Arg Arg Cys Arg Leu Asn Cys Pro Val Pro Arg Gln Thr Met Pro
 1 5 10 15
 Arg Arg Ala Ala Ala Lys Gly Arg Arg Arg Ser Val Ala Gln Ser Gly
 20 25 30
 Asp Asp Arg Val Glu Gln Arg Tyr Ser Ser Gln Arg Ala Asn Gln Gln
 35 40 45
 His His Gln Val Glu Thr Asp Asp Pro Arg Arg Asp Ala Phe Ser Ala
 50 55 60
 Arg Val Trp Gln Arg Leu Gly Leu Gly Phe Pro Ala Phe Arg Arg Arg
 65 70 75 80
 Pro Ala Ile Leu Glu Ile Asp Glu His Leu Arg Arg Ser Cys Cys Gln
 85 90 95
 Ala Leu Lys Val Ser Lys Val Met Arg Arg Asp Lys Gly Arg Ser Ala
 100 105 110
 Thr Gln Glu Pro Lys Arg Arg Arg Leu Gln
 115 120

<210> 1835
 <211> 677
 <212> DNA
 <213> Homo sapiens

<400> 1835
 nataactcaag gactttgacg gcacccgagc ccggttgctc cctgaggcca tcatgaaccc
 60
 cccagtggca ccctatgcta ctgtggcacc cagcacttta gccaccccc aggcccaggc
 120
 tctggcccg cagcaggccc tgcagcatgc acagaccctg gcccatgcc ctccccagac
 180
 gctgcagcac cctcagggtta tcccggcacc ccaggcactg tcccaccctc agagcctcca
 240
 gcagcctcag ggcctggggc accctcagcc catggcccaa acccagggtt tgggtccacc
 300
 tcaggccctg gtcaccagg gtctccagca cccccacaat cccttgctgc atggaggccg
 360
 gaagatgcc gactcagatg ccccccgaa tgtgaccgtg tctacctcaa ctatccccct
 420
 ttcaatggcg gccactctgc agcacagcca gcctccggac ctgagtagca tcgtgcacca
 480
 gatcaaccag ttttgccaga cgagggcagg catcagcact acctcagtgt gtgagggcca
 540

gatcgccaac cccagcccca ttagtcgcag tctgtctatc aatgcaagca cccgggtgtc
 600
 gacccacagc gtccccacac caatgccttc atgtgtgggc aatcccatgg agcacacca
 660
 cgcggccacc gccgcgg
 677

<210> 1836
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 1836
 Gly His His Glu Pro Pro Ser Gly Thr Leu Cys Tyr Cys Gly Thr Gln
 1 5 10 15
 His Phe Ser Pro ~~Pro~~ Pro Gly Pro Gly Ser Gly Pro Pro Ala Gly Pro
 20 25 30
 Ala Ala Cys Thr Asp Pro Gly Pro Cys Pro Ser Pro Asp Ala Ala Ala
 35 40 45
 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro
 50 55 60
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro
 65 70 75 80
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro
 85 90 95
 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys
 100 105 110
 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly
 115 120 125
 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu
 130 135 140

<210> 1837
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 1837
 nntctagaac actctgcccc tgaatctgta ccgggattgt ttggcccgtc acgaactcgt
 60
 acggctcgata tcaatatcac tgggttttct tcacagtatt taccgcccc ctatggacca
 120
 attgctgcgg acgtcaaaca aacctgggcg tgggaccac aggatctgac gattgtctca
 180
 atttctgctg atcacgacca taacctccga tatgcagtac agcatttcgg cgcaagcccg
 240
 accccgatcc agtaaccttc gataacgcga aagccggcac cccacataac tcgngtgtac
 300
 accgaagtcc ctgccaacgt tccatccgac ataggggagt taactaaccg aattatcaag
 360
 gggaaatcta cccccgtaac caaggccatc gcgattcaaa actgggttcg tgacagcgct
 420
 cgattccatt acgacatcaa cgcacccgaa ggtgacggct atcaggtact ggaaaacttc
 480

ctgctgcaca cccaccgagg ttattgcac catttcgagg cgtcaatggc actcatggca
 540
 cgacttgaag gtattccgac acgc
 564

<210> 1838
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 1838
 Xaa Leu Glu His Ser Ala Pro Glu Ser Val Pro Gly Leu Phe Gly Pro
 1 5 10 15
 Ser Arg Thr Arg Thr Val Asp Ile Asn Ile Thr Gly Phe Ser Ser Gln
 20 25 30
 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr
 35 40 45
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp
 50 55 60
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro
 65 70 75 80
 Thr Pro Ile Gln

<210> 1839
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 1839
 ncaatacggc tgaacaccgc tgatatcacc cgtactttcc ccgtcaacgg aaaattttcc
 60
 gaagttcagg caaaggctta tcaggcgggtg ctggacgctg cagatgcggc atttaaggca
 120
 gccgttccctg gcaataaatt ccgcgacgac catgctgcag cgatgaatgt tctcgccctc
 180
 cgccttgagg actgggggct tatgccggtc agcgcgaagg tcgctctttc ggacgagggc
 240
 gggcaacacc gtcgttggat gccgcacggc accagccacc atctagggct ggatgtgcac
 300

<210> 1840
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1840
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn
 1 5 10 15
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp
 20 25 30
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg
 35 40 45
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

50	55	60
Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly		
65	70	75
Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly		80
	85	90
Leu Asp Val His		95
100		

<210> 1841
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1841
 nnctccaaga acgtcccgga gtggggcccc agggcgctcg aactccccgg cgggccccgt
 60
 gtcgatccgg tggtcgagat cggcgggtccc ggtacgctag cccaatcgat ggtcgccccg
 120
 cgcgtcggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcggtgagg
 180
 acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccggtcgg cagccgcgcg
 240
 cagcaactcg cgatgatcgc gggggtcgag gcgaacggca tccgtccgat cctcgaccag
 300
 catttccgc tcgaaaatct ccccgacgcg
 330

<210> 1842
 <211> 110
 <212> PRT
 <213> Homo sapiens

1	5	10	15
Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro			
Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr			
20	25	30	
Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu			
35	40	45	
Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu			
50	55	60	
Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala			
65	70	75	80
Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro			
85	90	95	
Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala			
100	105	110	

<210> 1843
 <211> 473
 <212> DNA
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca
 60
 acagttttga gtccagatta acaccaagca gggtcatgaa agccttaagt tatgcatcat
 120
 tagataaaga agattttattg agtcctatta atcaaaatac cctgcaacga tcttcctcag
 180
 tgcgggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc
 240
 tcccggtgga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa
 300
 acataccacc acatgatgat cgagggtgca gagcatttgc ccatgatgca ggagggtctc
 360
 catctggaac tggagggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc
 420
 ttacggaaat aatgaattca atccattcag atgcctctcn cnnccnccccc ccc
 473

<210> 1844
 <211> 141
 <212> PRT
 <213> Homo sapiens

<400> 1844
 Met Lys Ala Asn Ser Phe Glu Ser Arg Leu Thr Pro Ser Arg Phe Met
 1 5 10 15
 Lys Ala Leu Ser Tyr Ala Ser Leu Asp Lys Glu Asp Leu Leu Ser Pro
 20 25 30
 Ile Asn Gln Asn Thr Leu Gln Arg Ser Ser Ser Val Arg Ser Met Val
 35 40 45
 Ser Ser Ala Thr Tyr Gly Gly Ser Asp Asp Tyr Ile Gly Leu Ala Leu
 50 55 60
 Pro Val Asp Ile Asn Asp Ile Phe Gln Val Lys Asp Ile Pro Tyr Phe
 65 70 75 80
 Gln Thr Lys Asn Ile Pro Pro His Asp Asp Arg Gly Ala Arg Ala Phe
 85 90 95
 Ala His Asp Ala Gly Gly Leu Pro Ser Gly Thr Gly Gly Leu Val Lys
 100 105 110
 Asn Ser Phe His Leu Leu Arg Gln Gln Met Ser Leu Thr Glu Ile Met
 115 120 125
 Asn Ser Ile His Ser Asp Ala Ser Xaa Xaa Xaa Xaa Pro
 130 135 140

<210> 1845
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1845
 aagcttacga cgcctagctt tggagacctg aaccacttga tcagtgcac aatgagtgga
 60
 gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgacgtg
 120
 aacctgatcc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg
 180

cgtggctccc agcagtaccg tgctctcact gtccttgagc tgacccagca gatgtgggac
 240
 tccaagaaca tgatgtgtgc tgetgacccg cgtcatggcc gctacctcac agtatctgcc
 300
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac
 360
 aagaactctt cctacttcgt ggagtggatc
 390

<210> 1846

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1846

Lys	Leu	Thr	Thr	Pro	Ser	Phe	Gly	Asp	Leu	Asn	His	Leu	Ile	Ser	Ala
1				5				10						15	
Thr	Met	Ser	Gly	Val	Thr	Cys	Cys	Leu	Arg	Phe	Pro	Gly	Gln	Leu	Asn
			20					25					30		
Ser	Asp	Leu	Arg	Lys	Leu	Ala	Val	Asn	Leu	Ile	Pro	Phe	Pro	Arg	Leu
		35					40					45			
His	Phe	Phe	Met	Val	Gly	Phe	Ala	Pro	Leu	Thr	Ser	Arg	Gly	Ser	Gln
	50					55					60				
Gln	Tyr	Arg	Ala	Leu	Thr	Val	Pro	Glu	Leu	Thr	Gln	Gln	Met	Trp	Asp
65					70				75					80	
Ser	Lys	Asn	Met	Met	Cys	Ala	Ala	Asp	Pro	Arg	His	Gly	Arg	Tyr	Leu
				85					90					95	
Thr	Val	Ser	Ala	Met	Phe	Arg	Gly	Lys	Met	Ser	Thr	Lys	Glu	Val	Asp
			100					105					110		
Glu	Gln	Met	Leu	Asn	Val	Gln	Asn	Lys	Asn	Ser	Ser	Tyr	Phe	Val	Glu
		115					120						125		
Trp	Ile														
	130														

<210> 1847

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1847

cagccgtgct ttcttgcgct aactcgggaa cggctatatc gcgcagatcc aacagttcca
 60
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcggtcaa gctggcgacc
 120
 ctggccgccc ccgcgttggc cgatcacgcc atgttggagc aggccttcca gctgttccag
 180
 caaaaaagtt gcggacaatc tcctgccgga tggctcgggtg ttcgacttca gggagcgcca
 240
 tgcactgcac tacgtcgtct atgacctgga gccgctgggt caggcggccc tggcgggcaa
 300
 gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn
 343

<210> 1848

<211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1848
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg
 1 5 10 15
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val
 20 25 30
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser
 35 40 45
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr
 50 55 60
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala
 65 70 75 80
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr
 85 90

<210> 1849
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1849
 cggaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt
 60
 gacattgaac atggagaccc aaaagagaat gtactagggt cagcttttga catgaaacag
 120
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca
 180
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagttgc tcttgatcca
 240
 tggatgtatc cggatgaacga agagctgtac tccagaaccc tccagcctct cctctttatc
 300
 aactctgcca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct
 360
 gacaaggaaa ggaaanatga ttacaatcaa
 390

<210> 1850
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1850
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu
 1 5 10 15
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu
 20 25 30
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr
 35 40 45
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln
 50 55 60
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

[illegible]

<210> 1851

<211> 574

<212> DNA

<213> Homo sapiens

<400> 1851

60
 120
 180
 240
 300
 360
 420
 480
 540
 574

<210> 1852

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1852

Xaa	Ile	Gly	Glu	Ala	Phe	Arg	Thr	Gly	Asp	Leu	Asp	Ser	Lys	Pro	Asp
1				5					10					15	
Pro	Ser	Arg	Ser	Phe	Arg	Pro	Tyr	Arg	Ala	Glu	Asp	Asn	Asp	Ser	Tyr
			20					25					30		
Ala	Ser	Glu	Ile	Lys	Glu	Leu	Gln	Leu	Val	Leu	Ala	Glu	Ala	His	Asp
			35				40					45			
Ser	Leu	Arg	Gly	Leu	Gln	Glu	Gln	Leu	Ser	Gln	Glu	Arg	Gln	Leu	Arg
	50				55					60					
Lys	Glu	Glu	Ala	Asp	Asn	Phe	Asn	Gln	Lys	Met	Val	Gln	Leu	Lys	Glu
65					70					75				80	
Asp	Gln	Gln	Arg	Ala	Leu	Leu	Arg	Arg	Glu	Phe	Glu	Leu	Gln	Ser	Leu

				85					90					95		
Ser	Leu	Gln	Arg	Arg	Leu	Glu	Gln	Lys	Phe	Trp	Ser	Gln	Glu	Lys	Asn	
			100					105					110			
Met	Leu	Val	Gln	Glu	Ser	Gln	Gln	Phe	Lys	His	Asn	Phe	Leu	Leu	Leu	
			115					120					125			
Phe	Met	Lys	Leu	Arg	Trp	Phe	Leu	Lys	Arg	Trp	Arg	Gln	Gly	Lys	Val	
			130					135					140			
Leu	Pro	Ser	Glu	Gly	Asp	Asp	Phe	Leu	Glu	Val	Asn	Ser	Met	Lys	Asp	
145					150				155					160		
Leu	Tyr	Leu	Leu	Met	Glu	Glu	Asp	Glu	Ile	Asn	Ala	Gln	His	Ser	Asp	
				165				170					175			
Asn	Lys	Ala	Cys	Thr	Gly	Asp	Ser	Trp	Thr	Gln	Asn	Thr	Pro	Asn		
			180					185					190			

```
<210> 1853
<211> 338
<212> DNA
<213> Homo sapiens
```

```
<400> 1853
gccggcgccg accaagccac ggcatgcccc acccaccttg gaagaggtgt cgttccgcc
60
cgtcattgag gagecgccg tcgaagctga cttgttcgtc cgctcgctca atacactcga
120
gcctgcgacg ggcatggcac ttctgcgcat ctcgcaccac atggatggca aggtcggcac
180
gacgttttac ctggatgacg atgtcatttt tgtcgcgccca cagaagcagc gctcagccga
240
gggccagcga ctcgaatacg agcccgcttc tttggccgag ttgctcgagc gcgctgctgc
300
atagaataca tatacccaag ctatgatgat gccgtcgt
338
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```
<210> 1854
<211> 100
<212> PRT
<213> Homo sapiens
```

```

<400> 1854
Met  Pro  His  Pro  Pro  Trp  Lys  Arg  Cys  Arg  Ser  Ala  Thr  Ser  Leu  Arg
  1              5              10              15
Ser  Ala  Pro  Ser  Lys  Leu  Thr  Cys  Ser  Ser  Ala  Arg  Ser  Ile  His  Ser
              20              25              30
Ser  Leu  Arg  Arg  Ala  Trp  His  Phe  Cys  Ala  Ser  Arg  Thr  Thr  Trp  Met
              35              40              45
Ala  Arg  Ser  Ala  Arg  Arg  Phe  Thr  Trp  Met  Thr  Met  Ser  Phe  Leu  Ser
              50              55              60
Arg  His  Arg  Ser  Ser  Ala  Gln  Pro  Arg  Ala  Ser  Asp  Ser  Asn  Thr  Ser
65              70              75              80
Pro  Ser  Leu  Trp  Pro  Ser  Cys  Ser  Ser  Ala  Leu  Leu  His  Arg  Ile  His
              85              90              95
Ile  Pro  Lys  Leu
              100

```


<210> 1855
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1855
 gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac
 60
 ccgagcgaaa cgcaggaaat cgtggcgcac gtcctggacc tggacaacca cgaggtcacg
 120
 gtgcagtgtc tgcgcattgg cggtggcctt ggcggttaagg aaatgcagcc gcacgggttc
 180
 gccgcgatcg cagcactcgg cgcgaccctg accgggacgac cggttcgact gcgactgacc
 240
 cgaaaccagg acatcaccat ctccggaaag cgccacccat acctcgcgga gtgggacgtg
 300
 gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg
 360
 tggagccttg acctctcgga gccggtgatg cagcggacgg tgtgtcacat cgataactcc
 420
 tattggatc
 429

<210> 1856
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1856
 Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys
 1 5 10 15
 Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu
 20 25 30
 Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly
 35 40 45
 Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala
 50 55 60
 Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr
 65 70 75 80
 Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala
 85 90 95
 Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg
 100 105 110
 Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro
 115 120 125
 Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile
 130 135 140

<210> 1857
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtcgccctac cgatcaacag acgcagccgc cgtgcgttga
 60
 gataccagcc gagcacgata atgctcagca tggtcagcag cagccagaac ggaaatcgca
 120
 gcaggcgctc gaacagctca ctgccacca gcaccagcgg gattgccccg gccacgacca
 180
 gtgcgccgag gagcagccac catcgccccg tcatgctgcg gcaactcgata ccaatacgtt
 240
 gcgcttcaac caatcgatct tggtcgaggc atgccgccca tcttccaaca ggcgagtcac
 300
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggt gcaaaccgag
 360
 acgcagcacg ggtgcctgtc ggtggcgggc gag
 393

<210> 1858

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1				5				10				15			
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
			20					25				30			
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	His	Arg	Pro	Leu	Met	Leu	Arg	His
		35					40				45				
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
	50					55				60					
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
65					70					75				80	
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
			85					90					95		
Arg	Val	Pro	Val	Gly	Gly	Gly	Arg								
			100												

<210> 1859

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1859

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 120
 agaactgccg acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattggt
 180
 ctgatcggag ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc
 240
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatag
 300
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 345

<210> 1860
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1860
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp
 1 5 10 15
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu
 20 25 30
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met
 35 40 45
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly
 50 55 60
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser
 65 70 75 80
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro
 85 90 95
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr
 100 105 110
 Leu Pro Trp
 115

<210> 1861
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 1861
 gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggctg tagaaaagcc
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 aatagtgagc ttcattcagt cggcttaggt gttatgaact tacatggcta tcttgctaaa
 120
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg
 180
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt
 240
 aaagactttg ataagtcaga ttatgcaaat ggaaaatatt tcgaatttta tacttcgcaa
 300
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggttttaga aatcccaacg
 360
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acggttttatt ccatgcttat
 420
 cgtttagcga ttgca
 435

<210> 1862
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 1862
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

1				5					10					15				
Val	Arg	Lys	Ala	Asn	Ser	Glu	Leu	His	Ser	Val	Gly	Leu	Gly	Val	Met			
			20					25					30					
Asn	Leu	His	Gly	Tyr	Leu	Ala	Lys	Asn	Lys	Ile	Gly	Tyr	Glu	Ser	Glu			
		35					40					45						
Glu	Ala	Lys	Asp	Phe	Ala	Asn	Ile	Phe	Phe	Met	Met	Met	Asn	Tyr	Tyr			
	50					55				60								
Ser	Leu	Glu	Arg	Ser	Met	Gln	Ile	Ala	Lys	Glu	Arg	Gln	Glu	Thr	Phe			
65					70				75						80			
Lys	Asp	Phe	Asp	Lys	Ser	Asp	Tyr	Ala	Asn	Gly	Lys	Tyr	Phe	Glu	Phe			
			85					90					95					
Tyr	Thr	Ser	Gln	Ser	Phe	Glu	Pro	Lys	Tyr	Glu	Lys	Val	Arg	Lys	Leu			
		100					105					110						
Phe	Asp	Gly	Leu	Glu	Ile	Pro	Thr	Pro	Glu	Asp	Trp	Lys	Ala	Leu	Gln			
	115					120				125								
Lys	Glu	Val	Glu	Thr	His	Gly	Leu	Phe	His	Ala	Tyr	Arg	Leu	Ala	Ile			
	130					135				140								
Ala																		
145																		

<210> 1863

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1863

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tctccgtcgt gctcactacc cacaacatgg atgaggctca acggctgggt gatcacgtct
120
ggatcgtcga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt
180
cgagtttgga agatgtgttc ctactcaca ctagtgaccg cgcagcaggg aggaattgac
240
atgacgacac tcgatctccg ccccgacact caggccgcac cggtgctgc acgctgcgt
300
aaccacgctc tcaccgaggt gcgtctggtg atgcgcaacg gtgagcagct gctactagct
360
ctcgtcattc ccacgggat catcgtcgcc gggcgcttcc tggcgggccg ggtcggactg
420
acgatggacg tcttagcacc ctactgctg gcgctcgcca tctggctgac atgtttcact
480
tccaagcga tcatgaccgg ttttgaacgc cgttacgggg tgctcgaacg attgtccgca
540
accccgtagt gtcggctggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
600
ctcgtcagg tgatactgct tgcacatc tctttagcgc tgggctggca cccacaggt
660
tccggcctgg cctggctccc aaccctggtg agcgttgtgc tcgcatgat gacattcggg
720
ctcgagcac tggcaatggc cggcgtggc aaagctgaag tcaactctcg actggccaac
780
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792

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<210> 1864
 <211> 264
 <212> PRT
 <213> Homo sapiens

<400> 1864

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Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys
 1           5           10           15
Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg
          20          25          30
Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser
          35          40          45
Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys
          50          55          60
Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp
65          70          75          80
Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala
          85          90          95
Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg
          100         105         110
Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile
          115         120         125
Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val
          130         135         140
Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr
145          150          155          160
Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu
          165          170          175
Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys
          180          185          190
Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val
          195          200          205
Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala
          210          215          220
Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly
225          230          235          240
Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu
          245          250          255
Gly Leu Ala Asn Leu Val Tyr Ile
          260

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<210> 1865
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 1865

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ngccggctga tcaaacaact cacagacatg ggcttcccca gagagccagc tgaggaggcc
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ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg
120
gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccttc
180

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ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag
 240
 gatggcggcc tcgtggaaga gccacgcct tcaccgttct tgccttcccc aagcctgaag
 300
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggttg ctccgggctg
 360
 ggcattgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc
 420
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtgagcct
 480
 cttaactctt cccagcccag tctccgtgct caagtgcctc agtttctatc cctcaggtt
 540
 caagcacagc ttttgagtt tgcagcaaaa aacattggc tcaaccctgc actattaacc
 600
 tcgccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggca
 660
 taccaacggt taaaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa	Arg	Leu	Ile	Lys	Gln	Leu	Thr	Asp	Met	Gly	Phe	Pro	Arg	Glu	Pro
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Ala	Glu	Glu	Ala	Leu	Lys	Ser	Asn	Asn	Met	Asn	Leu	Asp	Gln	Ala	Met
			20					25					30		
Ser	Ala	Leu	Leu	Glu	Lys	Lys	Val	Asp	Val	Asp	Lys	Arg	Gly	Leu	Gly
		35					40					45			
Val	Thr	Asp	His	Asn	Gly	Met	Ala	Ala	Lys	Pro	Leu	Gly	Cys	Arg	Pro
	50				55						60				
Pro	Ile	Ser	Lys	Glu	Ser	Ser	Val	Asp	Arg	Pro	Thr	Leu	Leu	Asp	Lys
65					70				75					80	
Asp	Gly	Gly	Leu	Val	Glu	Glu	Pro	Thr	Pro	Ser	Pro	Phe	Leu	Pro	Ser
			85					90					95		
Pro	Ser	Leu	Lys	Leu	Pro	Leu	Ser	His	Ser	Ala	Leu	Pro	Ser	Gln	Ala
			100					105					110		
Leu	Gly	Gly	Val	Ala	Ser	Gly	Leu	Gly	Met	Gln	Asn	Leu	Asn	Ser	Ser
	115						120					125			
Arg	Gln	Ile	Pro	Ser	Gly	Asn	Leu	Gly	Met	Phe	Gly	Asn	Ser	Gly	Ala
	130					135				140					
Ala	Gln	Ala	Arg	Thr	Met	Gln	Gln	Pro	Pro	Gln	Pro	Pro	Val	Gln	Pro
145					150					155				160	
Leu	Asn	Ser	Ser	Gln	Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Gln	Phe	Leu
			165					170					175		
Ser	Pro	Gln	Val	Gln	Ala	Gln	Leu	Leu	Gln	Phe	Ala	Ala	Lys	Asn	Ile
		180					185						190		
Gly	Leu	Asn	Pro	Ala	Leu	Leu	Thr	Ser	Pro	Ile	Asn	Pro	Gln	His	Met
	195						200					205			
Thr	Met	Leu	Asn	Gln	Leu	Tyr	Gln	Leu	Gln	Leu	Ala	Tyr	Gln	Arg	Leu
	210					215					220				
Gln	Ile	Gln	Gln	Gln	Met	Leu	Gln	Ala	Gln	Arg	Asn	Val	Ser	Gly	

225

230

235

<210> 1867

<211> 518

<212> DNA

<213> Homo sapiens

<400> 1867

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 tccatgcatg ggacggcact tgggtccgag atcaggtagc caggcatgga aggaacatgg
 120
 gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca
 180
 tctggttggc tggccctgtt acccaacaac gtggtggcca aggccttggtg cccggagagg
 240
 ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca
 300
 cctctcctgc ctccaccctt tccaccnng cagccccgc ctctcccgca gaactctccc
 360
 caagccagac cgcttgacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa
 420
 gcgaggtgct ttgcaccccc aagtgatcat gttcccgctg ccagcctgcc aaggatgatg
 480
 ggagcttggg gagcggggc tggcagggc tttccgga
 518

<210> 1868

<211> 73

<212> PRT

<213> Homo sapiens

<400> 1868

Gln	Asp	Arg	Pro	Ser	Gly	Trp	Leu	Ala	Leu	Leu	Pro	Asn	Asn	Val	Val
1				5					10					15	
Ala	Lys	Ala	Leu	Cys	Pro	Glu	Arg	Phe	Leu	Gly	Ala	Ser	Arg	Gly	Leu
			20					25					30		
His	Arg	Thr	Trp	Val	Gly	Thr	Pro	Ala	Pro	Ser	Pro	Pro	Leu	Leu	Pro
		35					40					45			
Pro	Pro	Leu	Pro	Pro	Xaa	Gln	Pro	Pro	Pro	Leu	Pro	Gln	Asn	Ser	Pro
	50					55					60				
Gln	Ala	Arg	Pro	Pro	Gly	Pro	Ala	Ala							
65					70										

<210> 1869

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1869

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 60
 ccgtgacatg ccgagcaccg aaacccacct gtggattcgc gagctgagcc gcatcgaccg
 120

cgacgtgtcg actgccaccc actttcgttg gagcgacgac ggcaccgtgc taggtcagac
 180
 gaccgacgat ggcaccgagc ctgagggttg tgccttgcca gcggtctact gccgtcgttg
 240
 cggccgcagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa
 300
 cgacagcatc cgacggaccc acgcggcaca cgacggtcgc ttccgagcct tgctttcggc
 360
 ccctcgagag ggagccagcg cggtcgacac cggcgaggcg aactgtect tacgtcgtt
 420
 cgacaccgtc aacagg
 436

<210> 1870
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1870
 Met Pro Ser Thr Glu Thr His Leu Trp Ile Arg Glu Leu Ser Arg Ile
 1 5 10 15
 Asp Arg Asp Val Ser Thr Ala Thr His Phe Arg Trp Ser Asp Asp Gly
 20 25 30
 Thr Val Leu Gly Gln Thr Thr Asp Asp Gly Thr Glu Pro Glu Val Val
 35 40 45
 Ala Leu Pro Ala Val Tyr Cys Arg Arg Cys Gly Arg Ser Gly Trp Gly
 50 55 60
 Val Gln Leu Ala Ser Thr Gly Asn Asn Leu Ser Glu Asn Asn Asp Ser
 65 70 75 80
 Ile Arg Arg Thr His Ala Ala His Asp Gly Arg Phe Arg Ala Leu Leu
 85 90 95
 Ser Ala Pro Arg Glu Gly Ala Ser Ala Val Asp Thr Gly Glu Ala Thr
 100 105 110
 Leu Ser Leu Arg Trp Phe Asp Thr Val Asn Arg
 115 120

<210> 1871
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 1871
 nntgcagcgc cccgaggtcg atgtctccaa cgtctttgcc agccttgaca tggctagcga
 60
 gcccgacctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg
 120
 cattggatcg aggagtcgac gtcgacggtg tttttcggcg gcgccggaat gtccaccgaa
 180
 tcaggatttc cggactttcg ctcggctggc gggctttaca ccactcagca tgacctgccc
 240
 ttccccgagg agtacatgct cagtcacagc tgtttggttg agcatcccgc ggagttcttc
 300
 gacttctacc gcacctacct catccatcct caggccaggc ccaatgctgg tcacgtgcg
 360

ttggttgccct tggagcaggc tggggaactt tcgacgatca ttacccagaa tattgacggc
 420
 ctgcaccaag aagctgggtc tcgtcagggtc attgagttgc atgggtcggt gcac
 474

<210> 1872
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1872
 Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr
 1 5 10 15
 Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp
 20 25 30
 Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe
 35 40 45
 Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala
 50 55 60
 Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg
 65 70 75 80
 Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu
 85 90 95
 Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala
 100 105 110
 Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His
 115 120 125

<210> 1873
 <211> 338
 <212> DNA
 <213> Homo sapiens

<400> 1873
 nacgcgtaga aatgaagccc cagctgggtca gagaccggaa atccggtagt gcacgggacg
 60
 ggttcctctcg gggatctcgg aggggagacc cccaccggg aggactggag gcagcgctc
 120
 tcccgccccg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgcggc
 180
 ccgcaggggg cgcgctcaag gcaaggtccg cggcgagaac ggtgccctagt gggagcgaag
 240
 ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctccaa attttagtat
 300
 gcatatgagt caccaggaaa gttttttgaa acaaattt
 338

<210> 1874
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1874
 Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

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Ser	Leu	Gly	Asp	Leu	Gly	Gly	Glu	Thr	Pro	Thr	Arg	Glu	Asp	Trp	Arg			
			20					25					30					
Gln	Arg	Leu	Ser	Arg	Pro	Gly	Ala	Arg	Ser	Leu	Phe	Pro	Ser	Phe	Gln			
		35					40					45						
Gly	Ala	Asn	Pro	His	Arg	Gly	Pro	Gln	Gly	Ala	Arg	Ser	Arg	Gln	Gly			
	50					55					60							
Pro	Arg	Arg	Glu	Arg	Cys	Pro	Val	Gly	Ala	Lys	Gly	Glu	Ala	Ser	Pro			
65					70					75					80			
Trp	Ser	Leu	Ala	Gly	Ser	Ser	Gly	Pro	Ala	Ser	Lys	Phe						
				85				90										

<210> 1875

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1875

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120

aaattcacag aacccgtgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180

caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240

aacaatggcc gtttaacagc gcacggaaca ttaatggttg atttagatgt gagcattttg
300

ccacaaattt tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360

tcacgc

366

<210> 1876

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1876

Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
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Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
20 25 30

Gly Asp Ser Phe Arg Asp Phe Gly Lys Phe Thr Glu Pro Val Ile Glu
35 40 45

Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
50 55 60

Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
65 70 75 80

Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
85 90 95

Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
100 105 110

Ser Lys Gly Ile Lys Ser Val Arg Ser Arg

115

120

<210> 1877
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1877
 acgcgtgagt ggtcgcaa atgacgggca agaaacgctt agaaagaaac tacccattaa
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 120
 ccaagctgct ggaccaagg ctgtagggtt gcaacgacct attatatctg aacatttttt
 180
 tcaatttgac ccatttgata aacgacattg ggttgctctca catcatttac cacacgctgc
 240
 gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccgg
 300
 atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg
 357

<210> 1878
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 1878
 Met Gln Ile Ala Glu Ile Ser Leu Ser Asp Cys Gly Tyr Ile Ile Ser
 1 5 10 15
 Ser Phe Gln Ala Ala Gly Pro Arg Ala Val Gly Leu Gln Arg Pro Ile
 20 25 30
 Ile Ser Glu His Phe Phe Gln Phe Asp Pro Phe Asp Lys Arg His Trp
 35 40 45
 Val Val Ser His His Leu Pro His Ala Ala Thr Ala Ala Phe Thr Ser
 50 55 60
 Gly Phe Glu Asp Cys Ala Gly Leu Val Ser Asp Thr Ala Gly Ser Asn
 65 70 75 80
 Thr Leu Asp Gly Lys Asp Tyr Val Glu Ser Cys Cys Asn Ala Ile Pro
 85 90 95

<210> 1879
 <211> 1062
 <212> DNA
 <213> Homo sapiens

<400> 1879
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 120
 gtccttccca caggctctga cgcccgctct gcggcttcgg tgtttgaaca ggccacagtc
 180
 caggagcgct tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg
 240

ttaagatcct gggtccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga
 300
 tgcaccatgc caatagtga taagttgaag gaggcctga aaccggccg caaggactcg
 360
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt ccttttacag
 420
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc
 480
 aaatatgtgt tgctcaaccc caaacagag ggagctagtc gccacaagag tggagatgac
 540
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca
 600
 gccccgcaga aagtgtttt cccacggag cgactgtctc tgaggtggga gcgggtcttc
 660
 cgcgtgggag caggactcca caaccttggc aacacctgct ttctcaatgc caccatccag
 720
 tgcttgacct acacaccacc tctagccaac tacctgctct ccaaggagca tgctcgcagc
 780
 tgccaccagg gaagcttctg catgctgtgt gtcatgcaga accacattgt ccaggccttc
 840
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 900
 cgacattcc gctttgggaa ccaggaggac gcgcatgagt tcctgcggta caccatcgac
 960
 gccatgcaga aagcctgcct gaatggctgt gccaaagttgg atcgtcaaac gcaggctact
 1020
 accttggtcc atcaaatttt tggagggtat ctcagatcac gc
 1062

<210> 1880

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1880

Met	Pro	Ile	Val	Asp	Lys	Leu	Lys	Glu	Ala	Leu	Lys	Pro	Gly	Arg	Lys
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Asp	Ser	Ala	Asp	Asp	Gly	Glu	Leu	Gly	Lys	Leu	Leu	Ala	Ser	Ser	Ala
			20					25					30		
Lys	Lys	Val	Leu	Leu	Gln	Lys	Ile	Glu	Phe	Glu	Pro	Ala	Ser	Lys	Ser
		35				40						45			
Phe	Ser	Tyr	Gln	Leu	Glu	Ala	Leu	Lys	Ser	Lys	Tyr	Val	Leu	Leu	Asn
50					55					60					
Pro	Lys	Thr	Glu	Gly	Ala	Ser	Arg	His	Lys	Ser	Gly	Asp	Asp	Pro	Pro
65				70					75					80	
Ala	Arg	Arg	Gln	Gly	Ser	Glu	His	Thr	Tyr	Glu	Ser	Cys	Gly	Asp	Gly
			85					90						95	
Val	Pro	Ala	Pro	Gln	Lys	Val	Leu	Phe	Pro	Thr	Glu	Arg	Leu	Ser	Leu
		100					105						110		
Arg	Trp	Glu	Arg	Val	Phe	Arg	Val	Gly	Ala	Gly	Leu	His	Asn	Leu	Gly
	115					120						125			
Asn	Thr	Cys	Phe	Leu	Asn	Ala	Thr	Ile	Gln	Cys	Leu	Thr	Tyr	Thr	Pro
130					135						140				
Pro	Leu	Ala	Asn	Tyr	Leu	Leu	Ser	Lys	Glu	His	Ala	Arg	Ser	Cys	His


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145          150          155          160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln
          165          170          175
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg
          180          185          190
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp
          195          200          205
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys
          210          215          220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu
225          230          235          240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg
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<210> 1881

<211> 358

<212> DNA

<213> Homo sapiens

<400> 1881

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120
tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggttaagca
180
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240
ccacatcgat cgatatctgc accatcacat cgatcgatag caagtctgta gccatggaag
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358

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<210> 1882

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1882

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          20          25          30
Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
          35          40          45
Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
          50          55          60
Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
65          70          75          80
Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
          85          90          95
Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
          100          105          110
Ile Arg Arg

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115

<210> 1883
 <211> 367
 <212> DNA
 <213> Homo sapiens

<400> 1883
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 120
 tgctgaaggc gatgagtctg tatttgtcaa ctccaattca aacagctcga tggcgctcc
 180
 tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat
 240
 gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga accttgatgg
 300
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 360
 cgatttn
 367

<210> 1884
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1884
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 Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala
 20 25 30
 Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser
 35 40 45
 Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val
 50 55 60
 Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu
 65 70 75 80
 Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp
 85 90 95
 Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp
 100 105 110
 Met Pro Ile Ala Gly Asp Xaa
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<210> 1885
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 1885
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 120
 ctgcgtagta cagctgctgt tgccgcgggg gccgcgaccg gtaccggggtt ccaaccactg
 180
 aactgggtgga tcctcgatcat tcccgggtctc gctgcgctca tcctgctggt gcgcaacgcc
 240
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 300
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 392

<210> 1886

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1886

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Pro	Arg	His	His	Val	Arg	Arg	Ser	Arg	His	Val	Gly	Asn	Pro	Val	Ile
			20					25					30		
Ser	Arg	Leu	Arg	Arg	Thr	Ser	Trp	Leu	Arg	Ser	Thr	Ala	Ala	Val	Ala
		35					40					45			
Ala	Gly	Ala	Ala	Thr	Gly	Thr	Gly	Phe	Gln	Pro	Leu	Asn	Trp	Trp	Ile
	50					55					60				
Leu	Val	Ile	Pro	Gly	Leu	Ala	Ala	Leu	Ile	Leu	Leu	Val	Arg	Asn	Ala
65					70					75				80	
Thr	Gly	Arg	Ala	Ala	Ala	Gly	Leu	Gly	Tyr	Leu	Phe	Gly	Ile	Gly	Leu
				85					90					95	
Phe	Thr	Thr	Thr	Ile	Ser	Trp	Val	Gly	Val	Ile	Gly	Pro	Pro	Val	Ala
			100					105						110	
Ile	Leu	Leu	Ile	Ala	Val	Met	Ala	Leu	Trp	Cys	Leu	Leu	Ala	Gly	Trp
		115					120						125		
Thr	Ile														
	130														

<210> 1887

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1887

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 120
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 180
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 240
 ggtctgcccc aggacatcgt ctggcgctcag cccttcccgg gcccggggct ggctatccgc
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attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcactgccga tgccatcacg
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 cgt
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<210> 1888
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1888
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 20 25 30
 Val Glu Ser Gly Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His
 35 40 45
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro
 50 55 60
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu
 65 70 75 80
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly
 85 90 95
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val
 100 105 110
 Leu Arg Thr Ala Asp Ala Ile Thr Arg
 115 120

<210> 1889
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 1889
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 acagcgtctc tcggtgatcg tatcgacatg gggctgggcc gggctcccgg cggtgacatg
 180
 ctctccgccc atgccctcaa tcaggggcag gtcattccgc ctgaggccat taattccctc
 240
 atcgccgaaa cggtaggggtt cgtgcgcgaa atgctaccgt cgaagcatcc gtacgcaaag
 300
 gtcgtcgtga ccccggcagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc
 360
 cagtcagcag cgtgggctgg tgagcagggt atggactacg cctacgccca gtttttcacc
 420
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggttcccc
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 ggcaggaccc tctcagcagt gtgtgtatcg gctgctccga cgcgtccgga
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<210> 1890

<211> 176
 <212> PRT
 <213> Homo sapiens

<400> 1890
 Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile
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 Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln
 20 25 30
 Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile
 35 40 45
 Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His
 50 55 60
 Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu
 65 70 75 80
 Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His
 85 90 95
 Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln
 100 105 110
 Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu
 115 120 125
 Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp
 130 135 140
 Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro
 145 150 155 160
 Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro
 165 170 175

<210> 1891
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 1891
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 tgc
 423

<210> 1892
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 1892

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Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
 1           5           10           15
Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
          20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
          35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
          50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
          85           90           95
Gln Lys Pro Cys Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
          100          105          110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
          115          120

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<210> 1893

<211> 886

<212> DNA

<213> Homo sapiens

<400> 1893

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120
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180
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660
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720
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780
ccttcgccga cccaaccatc cttgatgccg tttccgatgc tgacctggcc tgggtcatcg
840

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acccattga tggcactaag aacttcgtgc acgggtctgt tgatca
886

<210> 1894

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1894

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Val	Glu	Gly	Arg	His	Asp	Ala	Glu	Leu	Val	Glu	Lys	Ile	Trp	Gly	Asp
			20					25					30		
Asp	Leu	Arg	His	Val	Gly	Val	Val	Val	Glu	Tyr	Met	Gly	Gly	Met	Asp
		35					40					45			
Asp	Leu	Val	Gly	Ile	Val	Ala	Glu	Phe	Lys	Pro	Gly	Pro	Gly	His	Arg
		50				55					60				
Leu	Gly	Val	Leu	Val	Asp	His	Leu	Val	Ala	Asp	Thr	Lys	Glu	Ser	Arg
65					70					75				80	
Val	Ala	Asp	Glu	Val	Arg	Arg	Gly	Gly	Tyr	Ser	Glu	Tyr	Val	Met	Ile
				85					90					95	
Thr	Gly	His	Arg	Phe	Ile	Asp	Ile	Trp	Gln	Ala	Ile	Lys	Pro	Gln	Arg
		100						105					110		
Ile	Gly	Arg	Gln	Glu	Trp	Pro	Glu	Val	Pro	Met	Asp	Glu	Asp	Phe	Lys
		115				120						125			
Leu	Gly	Thr	Leu	Lys	Arg	Leu	Gly	Leu	Pro	His	Ser	Thr	Gln	Ala	Asp
		130				135					140				
Val	Gly	Lys	Ala	Trp	Gln	Ala	Met	Leu	Ala	Arg	Val	Arg	Asp	Trp	His
145					150					155				160	
Asp	Leu	Asp	Pro	Arg	Phe	Asn	Thr	Glu	Met	Glu	Lys	Leu	Ile	Asp	Phe
				165				170						175	
Val	Thr	Arg	Asp	His	Val	Asp	Glu	Leu	Asp	Asn	Gly	Glu	Met	Ala	
				180				185						190	

<210> 1895

<211> 2555

<212> DNA

<213> Homo sapiens

<400> 1895

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420

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480
gaccagatca aggccataag aggcagcaat gaatacacag aagggccttc ggtggtgaaa
540
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<210> 1896

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1896

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Thr	Leu	Pro	Ser	Cys	Leu	Ala	Cys	Asn	Arg	Gln	Cys	Leu	Cys	Ser	Ala
			20					25					30		
Glu	Ser	Met	Val	Glu	Tyr	Gly	Thr	Cys	Met	Cys	Leu	Val	Lys	Gly	Ile
		35					40					45			
Phe	Tyr	His	Cys	Ser	Asn	Asp	Asp	Glu	Gly	Asp	Ser	Tyr	Ser	Asp	Asn
	50					55				60					
Pro	Cys	Ser	Cys	Ser	Gln	Ser	His	Cys	Cys	Ser	Arg	Tyr	Leu	Cys	Met
65					70					75				80	
Gly	Ala	Met	Ser	Leu	Phe	Leu	Pro	Cys	Leu	Leu	Cys	Tyr	Pro	Pro	Ala
				85				90					95		
Lys	Gly	Cys	Leu	Lys	Leu	Cys	Arg	Arg	Cys	Tyr	Asp	Trp	Ile	His	Arg
			100					105					110		
Pro	Gly	Cys	Arg	Cys	Lys	Asn	Ser	Asn	Thr	Val	Tyr	Cys	Lys	Leu	Glu
		115					120					125			
Ser	Cys	Pro	Ser	Arg	Gly	Gln	Gly	Lys	Pro	Ser					
	130					135									

<210> 1897

<211> 938

<212> DNA

<213> Homo sapiens

<400> 1897

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 120

cacgcttctt cctgagcaa acaccgggcc atccatcgtg gggagcggcc ccaccgctgt
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 360
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 480
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 720
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 780
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 840
 cctttccctt gcctcgagtg tggccgggct tccgccagag gtggtctctg gctgtccaca
 900
 agtgtagccc caaggcccca aactgtagcc ctagatct
 938

<210> 1898
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 1898
 Arg His Gly Cys Tyr Val Cys Gly Lys Ser Phe Ala Trp Arg Ser Thr
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 20 25 30
 Thr Asp Cys Gly Lys Gly Phe Gly His Ala Ser Ser Leu Ser Lys His
 35 40 45
 Arg Ala Ile His Arg Gly Glu Arg Pro His Arg Cys Leu Glu Cys Gly
 50 55 60
 Arg Ala Phe Thr Gln Arg Ser Ala Leu Thr Ser His Leu Arg Val His
 65 70 75 80
 Thr Gly Glu Lys Pro Tyr Gly Cys Ala Asp Cys Gly Arg Arg Phe Ser
 85 90 95
 Gln Ser Ser Ala Leu Tyr Gln His Arg Arg Val His Ser Gly Glu Thr
 100 105 110
 Pro Phe Pro Cys Pro Asp Cys Gly Arg Ala Phe Ala Tyr Pro Ser Asp
 115 120 125
 Leu Arg Arg His Val Arg Ile His Thr Gly Glu Lys Pro Tyr Pro Cys
 130 135 140
 Pro Asp Cys Gly Arg Arg Phe Ser Ser Ser Ser Leu Leu Val Ser His

145 150 155 160
 Arg Arg Ala His Ser Gly Glu Cys Pro Tyr Val Cys Asp Gln Cys Gly
 165 170 175
 Lys Arg Phe Ser Gln Arg Lys Asn Leu Ser Gln His Gln Val Ile His
 180 185 190
 Thr Gly Glu Lys Pro Tyr His Cys Pro Asp Cys Gly Arg Cys Phe Arg
 195 200 205
 Arg Ser Arg Ser Leu Ala Asn His Arg Thr Thr His Thr Gly Glu Lys
 210 215 220
 Pro His Gln Cys Pro Ser Cys Gly Arg Arg Phe Ala Tyr Pro Ser Leu
 225 230 235 240
 Leu Ala Ser His Arg Arg Val His Ser Gly Glu Arg Pro Tyr Ala Cys
 245 250 255
 Asp Leu Cys Ser Lys Arg Phe Ala Gln Trp Ser His Leu Ala Gln His
 260 265 270
 Gln Leu Leu His Thr Gly Glu Lys Pro Phe Pro Cys Leu Glu Cys Gly
 275 280 285
 Arg Ala Ser Ala Arg Gly Gly Leu Trp Leu Ser Thr Ser Val Ala Pro
 290 295 300
 Arg Pro Gln Thr Val Ala Leu Asp
 305 310

<210> 1899

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1899

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 120
 gaggaatat caggccggct gcggagggaa ctgggcaaaa gggacaggaa ccgggggagcag
 180
 ctggaggcca ccctgctgca ggtgttgaaa aaggtggagg agtttcgaat caggtattga
 240
 gatgagatct ccaagcgcac agacatggag ttcacctttg ttcagctgaa gaaggacctg
 300
 gatgcagagt gtcttcatcg gactgaactg gaaaccaagt taaaaagcct ggagagcttc
 360
 gtggagtga tgaaaaccat ctatgagcag gagctgaagg acctggcagc acaggtgaag
 420
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 480
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 508

<210> 1900

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1900

Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

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	20	25	30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg			
	35	40	45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr			
	50	55	60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr			
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<210> 1901

<211> 453

<212> DNA

<213> Homo sapiens

<400> 1901

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120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctccttc ttccacaacg
180
cgcacccggg cgagaagtgg ccggtctacg gtttccgcag cgacacggag cccggccgcg
240
cgaccgcgat cttcgcgggc aagtcctccg tggagtacga cccaaggcg gcgcagcgcc
300
gcgcgtggga gggctttgac atgcgcgaat ggggcatgca caggcaggac ctggtggaaa
360
cgctcaccga ttccatcgcc gacgagggca acgcttagcg acgccagcgc caccgagttt
420
agagaaatga aagaaatttt aatagagggt gga
453

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<210> 1902

<211> 151

<212> PRT

<213> Homo sapiens

<400> 1902

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	20	25	30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro			
	35	40	45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala			
	50	55	60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala			
65	70	75	80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg			
	85	90	95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala			
	100	105	110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr			

	115						120					125							
Arg	Ala	Thr	Leu	Ser	Asp	Ala	Ser	Ala	Thr	Glu	Phe	Arg	Glu	Met	Lys				
	130						135					140							
Glu	Ile	Leu	Ile	Glu	Gly	Gly													
145						150													

<210> 1903

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1903

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gacttgctcta cgccgctggc ccagttccgc gaggacatca cgtggaggcg gccccagaga
120
atgtgtgcca acccccgtt gtttccaaat gaccaacggg aagggcaggt gaagcagggg
180
ctgctggggg attgctggtt cctgtgtgcc tgcgccgcgc tgcagaagag caggcacctc
240
ctggaccagg tcattcctgc gggacagccg agctgggccg accaggagta ccggggctcc
300
ttcacctgtc gcttttggca gtttggacgg tgggtggagg gtccatgggt cccttcgagc
360
ccctgtgggc ggggcaggtg gcggatgccc tgggtggacct gaccggcggc ctggcagaaa
420
gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg
480
agcacaggac ttgtcggcag ctgctccacc tgaaggacca gtgtctgata a
531

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<210> 1904

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1904

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Ser	Leu	Phe	Cys	Asp	Leu	Ser	Thr	Pro	Leu	Ala	Gln	Phe	Arg	Glu	Asp				
			20					25					30						
Ile	Thr	Trp	Arg	Arg	Pro	Gln	Arg	Ile	Cys	Ala	Asn	Pro	Arg	Leu	Phe				
			35				40					45							
Pro	Asn	Asp	Gln	Arg	Glu	Gly	Gln	Val	Lys	Gln	Gly	Leu	Leu	Gly	Asp				
	50					55					60								
Cys	Trp	Phe	Leu	Cys	Ala	Cys	Ala	Ala	Leu	Gln	Lys	Ser	Arg	His	Leu				
65					70					75					80				
Leu	Asp	Gln	Val	Ile	Pro	Ala	Gly	Gln	Pro	Ser	Trp	Ala	Asp	Gln	Glu				
				85				90						95					
Tyr	Arg	Gly	Ser	Phe	Thr	Cys	Arg	Phe	Trp	Gln	Phe	Gly	Arg	Trp	Val				
			100					105					110						
Glu	Gly	Pro	Trp	Val	Pro	Ser	Ser	Pro	Cys	Gly	Arg	Gly	Arg	Trp	Arg				
			115				120						125						
Met	Pro	Trp	Trp	Thr															

130

<210> 1905
 <211> 387
 <212> DNA
 <213> Homo sapiens

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 120
 ctctggccg ccgtgcgctg gttgctgctg ggcgcgttgg ccgatcacct ggcgggtgctg
 180
 ttgttcgccc aggtgctgca cgcggcgacc tttgccagct ttcacgcctc tgccattcat
 240
 ttcgtgcaac gtagcttcgg cgcgcgcenca gcaaggccag ggcaggcggt atacgctgca
 300
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 360
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 387

<210> 1906
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1906
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 Val Leu Met Phe Leu Ala Met Ser Arg Ile Leu Ala Arg Phe Ser Val
 20 25 30
 Arg Arg Val Leu Leu Ala Ser Phe Leu Leu Ala Ala Val Arg Trp Leu
 35 40 45
 Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln
 50 55 60
 Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His
 65 70 75 80
 Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala
 85 90 95
 Leu Tyr Ala Ala Leu Ala Gly Thr Gly Gly Ala Leu Gly Ala Leu Tyr
 100 105 110
 Ala Gly Tyr Ser Trp Asn Ser Leu Gly Pro Thr Trp Thr Phe Ser Ile
 115 120 125
 Val

<210> 1907
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1907

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 120
 ggccggcgaca cgtcgaaggc cacgtttctgg acggggcctgc gcccgatgac gccggacggc
 180
 acgccgatcg tcggccgcac gccggtgtcg aacctgttcc tgaacaccgg ccacggcacg
 240
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 300
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 333

<210> 1908

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1908

Thr	Arg	Phe	Asp	Gln	Arg	Ile	Arg	Val	Gly	Gly	Met	Ala	Glu	Ile	Val
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Gly	Phe	Asp	Lys	Lys	Leu	Arg	Ala	Ala	Arg	Arg	Glu	Thr	Leu	Glu	Met
			20					25					30		
Cys	Val	Asn	Asp	Leu	Phe	Pro	Gly	Gly	Gly	Asp	Thr	Ser	Lys	Ala	Thr
		35					40					45			
Phe	Trp	Thr	Gly	Leu	Arg	Pro	Met	Thr	Pro	Asp	Gly	Thr	Pro	Ile	Val
	50					55				60					
Gly	Arg	Thr	Pro	Val	Ser	Asn	Leu	Phe	Leu	Asn	Thr	Gly	His	Gly	Thr
65					70					75				80	
Leu	Gly	Trp	Thr	Met	Val	Cys	Gly	Ser	Gly	Gln	Leu	Leu	Ala	Asp	Leu
				85					90					95	
Ile	Ser	Gly	Lys	Met	Pro	Ala	Ile	Gln	Ala	Asp	Asp	Leu	Ser	Xaa	
			100					105						110	

<210> 1909

<211> 2767

<212> DNA

<213> Homo sapiens

<400> 1909

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 120
 actccggagg agctggcagc cctctttgcg ccctacggca cggtcacatg ctgcgccgtc
 180
 atgaaacagt tcgccttcgt gcacatgcgc gagaacgcgg gcgcgctgcg cgccatcgaa
 240
 gccctgcacg gccacgagct gcggccgggg cgcgcgctcg tgggtgaaat gtcgcgcccc
 300
 aggccctetta atacttgga gatttttcgtg ggcaatgtgt cggctgcatg cacgagccag
 360
 gaactgcga gcctcttcga gcgccgcgga cgcgtcatcg agtgtgacgt ggtgaaagac
 420

tacgcgtttg ttcacatgga gaaggaagca gatgccaaag cgcgaatcgc gcagctcaac
480
ggcaaagaag tgaagggcaa gcgcacatcaac gtggaactct ccaccaaggg tcagaagaag
540
gggcctggcc tggtgtcca gtctggggac aagaccaaga aaccaggggc tggggatacg
600
gccttccttg gaactggttg cttctctgcc accttcgact accagcaggc ttttggaac
660
agcactggtg gctttgatgg gcaagcccgt cagccacac cacccttctt tggtcgcgac
720
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840
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1080
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1260
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1440
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1560
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1620
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1800
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1860
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1920
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1980
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2040

gattacctgc gggcggtca gatgcactct ggctaccagc gccgcatgta gggccatcct
 2100
 gggatggggc accacagggg gggagggaga aaagagggtg gtaggggttac agatccaggt
 2160
 tataactact ctggcccata ctttctctgg ttgtgggttt tcatgccctc taccatgtgg
 2220
 gccttcccca ggagatgac ctgttaagtg ttcggcagta acctactttg ttccttcgcc
 2280
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 2340
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 2400
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 2460
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 2640
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<210> 1910

<211> 669

<212> PRT

<213> Homo sapiens

<400> 1910

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		20						25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
		35					40					45			
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
	50					55					60				
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65					70					75				80	
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
			85						90					95	
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
		100					105						110		
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
		115					120					125			
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
		130				135						140			
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
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Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

				165					170					175			
Gly	Thr	Gly	Gly	Phe	Ser	Ala	Thr	Phe	Asp	Tyr	Gln	Gln	Ala	Phe	Gly		
			180						185					190			
Asn	Ser	Thr	Gly	Gly	Phe	Asp	Gly	Gln	Ala	Arg	Gln	Pro	Thr	Pro	Pro		
		195						200					205				
Phe	Phe	Gly	Arg	Asp	Arg	Ser	Pro	Leu	Arg	Arg	Ser	Pro	Pro	Arg	Ala		
	210					215					220						
Ser	Tyr	Val	Ala	Pro	Leu	Thr	Ala	Gln	Pro	Ala	Thr	Tyr	Arg	Ala	Gln		
225					230					235					240		
Pro	Ser	Val	Ser	Leu	Gly	Ala	Ala	Tyr	Arg	Ala	Gln	Pro	Ser	Ala	Ser		
				245					250					255			
Leu	Gly	Val	Gly	Tyr	Arg	Thr	Gln	Pro	Met	Thr	Ala	Gln	Ala	Ala	Ser		
			260					265					270				
Tyr	Arg	Ala	Gln	Pro	Ser	Val	Ser	Leu	Gly	Ala	Pro	Tyr	Arg	Gly	Gln		
	275						280					285					
Leu	Ala	Ser	Pro	Ser	Ser	Gln	Ser	Ala	Ala	Ala	Ser	Ser	Leu	Gly	Pro		
	290					295						300					
Tyr	Gly	Gly	Ala	Gln	Pro	Ser	Ala	Ser	Ala	Leu	Ser	Ser	Tyr	Gly	Gly		
305					310					315					320		
Gln	Ala	Ala	Ala	Ala	Ser	Ser	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Gly	Ser		
				325					330					335			
Ser	Leu	Ala	Ser	Tyr	Gly	Asn	Gln	Pro	Ser	Ser	Tyr	Gly	Ala	Gln	Ala		
		340						345					350				
Ala	Ser	Ser	Tyr	Gly	Val	Arg	Ala	Ala	Ala	Ser	Ser	Tyr	Asn	Thr	Gln		
	355						360					365					
Gly	Ala	Ala	Ser	Ser	Leu	Gly	Ser	Tyr	Gly	Ala	Gln	Ala	Ala	Ser	Tyr		
	370					375					380						
Gly	Ala	Gln	Ser	Ala	Ala	Ser	Ser	Leu	Ala	Tyr	Gly	Ala	Gln	Ala	Ala		
385					390					395					400		
Ser	Tyr	Asn	Ala	Gln	Pro	Ser	Ala	Ser	Tyr	Asn	Ala	Gln	Ser	Ala	Pro		
				405					410					415			
Tyr	Ala	Ala	Gln	Gln	Ala	Ala	Ser	Tyr	Ser	Ser	Gln	Pro	Ala	Ala	Tyr		
		420						425					430				
Val	Ala	Gln	Pro	Ala	Thr	Ala	Ala	Ala	Tyr	Ala	Ser	Gln	Pro	Ala	Ala		
	435						440					445					
Tyr	Ala	Ala	Gln	Ala	Thr	Thr	Pro	Met	Ala	Gly	Ser	Tyr	Gly	Ala	Gln		
	450					455					460						
Pro	Val	Val	Gln	Thr	Gln	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Ala	Ser	Met		
465					470					475				480			
Gly	Leu	Ser	Gly	Ser	Tyr	Gly	Ala	Gln	Ser	Ala	Ala	Ala	Ala	Thr	Gly		
				485					490					495			
Ser	Tyr	Gly	Ala	Ala	Ala	Ala	Tyr	Gly	Ala	Gln	Pro	Ser	Ala	Thr	Leu		
		500						505					510				
Ala	Ala	Pro	Tyr	Arg	Thr	Gln	Ser	Ser	Ala	Ser	Leu	Ala	Ala	Ser	Tyr		
	515						520					525					
Ala	Ala	Gln	Gln	His	Pro	Gln	Ala	Ala	Ala	Ser	Tyr	Arg	Gly	Gln	Pro		
	530					535					540						
Gly	Asn	Ala	Tyr	Asp	Gly	Ala	Gly	Gln	Pro	Ser	Ala	Ala	Tyr	Leu	Ser		
545					550					555				560			
Met	Ser	Gln	Gly	Ala	Val	Ala	Asn	Ala	Asn	Ser	Thr	Pro	Pro	Pro	Tyr		
				565					570					575			
Glu	Arg	Thr	Arg	Leu	Ser	Pro	Pro	Arg	Ala	Ser	Tyr	Asp	Asp	Pro	Tyr		
		580						585					590				
Lys	Lys	Ala	Val	Ala	Met	Ser	Lys	Arg	Tyr	Gly	Ser	Asp	Arg	Arg	Leu		

595	600	605
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe		
610	615	620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp		
625	630	635
Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu		
645	650	655
Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met		
660	665	

<210> 1911
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1911
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 120
 cgcattcgacg atgaaagctt cctccgccca gttgagccga cccaagccgc accgtgggctg
 180
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 240
 gaagcactgg tgggtccgct cgtcattgag gtggagggga aattcgcagg gcaggttaacc
 300
 ctgggaaaca ttcagcatgg cagcattcgc gattgctgg
 339

<210> 1912
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1912
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 20 25 30
 Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu
 35 40 45
 Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser
 50 55 60
 Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg
 65 70 75 80
 Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala
 85 90 95
 Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys
 100 105 110
 Trp

<210> 1913
 <211> 767

<212> DNA

<213> Homo sapiens

<400> 1913

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120
gcgccagtac tcgatctcgt cctcccagcc ttgtccgaaa cctccgcaa tctcatcggc
180
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240
tcccagctgt cgggcagtac aaggcacctc ggatcaagct ttcttggcgt gaactgggtcc
300
tggtacccat caatgccacc cacctgcact ccaatcccc acaagttgtc caacacgccg
360
cagaattgcy tcgcagccac ccggaccttg ccatcaaggt ggcccgcccc accggaccag
420
caccggctct cctcaacctc gtcgatacgc gattgcgtct ggcagctcat cgcgtccatg
480
cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg
540
caatgctgtc caggctgacc cggtgtggt cccagcacca ccaccttcg gtccgcatcg
600
ccaccaatcg tgggtgggct actgcggtcg aggaggtcgt cgcgcgctg cgacaggagg
660
ggcgccgtca tatcgagtg ggaagcctgt ggatttgca cgacgagaat ttccgcattc
720
atactcgcca ggctttgcat gccggtgccg aggttgtcgc cgcaccg
767

<210> 1914

<211> 190

<212> PRT

<213> Homo sapiens

<400> 1914

Met	Ser	His	Leu	His	Pro	His	Ile	Glu	Ser	Thr	Val	Ser	Phe	Val	Pro
1				5				10						15	
Ala	Val	Gly	Gln	Tyr	Lys	Ala	Pro	Arg	Ile	Lys	Leu	Ser	Trp	Arg	Glu
			20					25						30	
Leu	Val	Leu	Val	Pro	Ile	Asn	Ala	Thr	His	Leu	His	Ser	Asn	Pro	Pro
			35				40						45		
Gln	Val	Val	Gln	His	Ala	Ala	Glu	Leu	Arg	Arg	Ser	His	Pro	Asp	Leu
			50			55					60				
Ala	Ile	Lys	Val	Ala	Arg	Pro	Thr	Gly	Pro	Ala	Pro	Val	Leu	Leu	Asn
65					70					75					80
Leu	Val	Asp	Thr	Arg	Leu	Arg	Leu	Ala	Ala	His	Arg	Val	His	Ala	Gln
				85					90					95	
Glu	Leu	Asp	Ser	Leu	Val	Leu	Ser	Ser	Pro	Asp	Gly	Gly	Asp	Leu	Arg
			100					105					110		
Gly	Ser	Ala	Met	Leu	Ser	Arg	Leu	Thr	Arg	Leu	Trp	Ser	Gln	His	His
			115				120						125		
His	Leu	Pro	Val	Arg	Ile	Ala	Thr	Asn	Arg	Gly	Gly	Ala	Thr	Ala	Val

130		135		140	
Glu Glu Val Val Ala Arg Leu Arg Gln Glu Gly Arg Arg His Ile Ala					
145		150		155	160
Val Gly Ser Leu Trp Ile Cys Asp Asp Glu Asn Phe Arg Ile His Thr					
	165		170		175
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro					
	180		185		190

<210> 1915
 <211> 571
 <212> DNA
 <213> Homo sapiens

<400> 1915
 agcggtccca ggccccacag gccccctctg gctctcaggc cccccgcca gtggccagga
 60
 aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgtcatg tccctcccca
 120
 ggaccctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc
 180
 tggcacacac ggctcagggc gaggcactgc cccatggggc tgcattgatcc acgctcacag
 240
 gtgtcattgt ctatgtctag gggggcttgg caccatggga aaccaccca gaacacatgg
 300
 agaagccaca gcacaacctc agcgcccgcc atgcaggacc ctgggtctca cccattgcac
 360
 ccaccgtgcg ggaccctgc gcctcaccgc gaacatccac agtgtgggac tgctgcgtct
 420
 caccactgc acctgccgtg caggatccct gagtctcacc cgccgcaccc gccgtgcggg
 480
 atccctgagt ctacccgcc gcaccgcgcg tacctgccgc atccgccatg cgggaccct
 540
 gcgtctcacc caccgcaccc gccgtgcggg a
 571

<210> 1916
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1916
 Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg
 1 5 10 15
 Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His
 20 25 30
 Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu
 35 40 45
 His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys
 50 55 60
 Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu
 65 70 75 80
 Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro
 85 90 95
 His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His

100
Pro Pro His Pro Pro Cys Gly
115

105

110

<210> 1917
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1917
nnacgcgtga ccggcgaaga tctccgcacc ctatctgccg ggtacacgcc ggggtgattcc
60
gatatgtctt gggctgccat caccttgtgg cgcggtgtcg ttgcctccgc cttggaccgt
120
cateccctatg gcccggtgaa gtcggtaaag gtagcaggtc cggccggcca ccagccccg
180
gatttcgccg ccggatgggt gtcgcaccgc ttggcagttc ccgtacatcg cacagtggcc
240
gactcccaaa ggagacactt cccggtgact catttgagc tcaatcgga gacaacccac
300
gtagacgtcg atgtcattga cgagcgcacg gttcgtgtat gtgttcggg ttcgccggaa
360

<210> 1918
<211> 120
<212> PRT
<213> Homo sapiens

<400> 1918
Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr
1 5 10 15
Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly
20 25 30
Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser
35 40 45
Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala
50 55 60
Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala
65 70 75 80
Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg
85 90 95
Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg
100 105 110
Val Cys Val Pro Gly Ser Pro Glu
115 120

<210> 1919
<211> 354
<212> DNA
<213> Homo sapiens

<400> 1919
nnccggccgca gctgtgtcca ctgcgctgtc cctgccacct cggccatctg cctctctctt
60

ccaggctgca gccatccctc ctgcactgct gaggcctggc cagcgcgcatc ncggccacgc
 120
 ccacctccat cctctttgcc cttactaaa cactggggagc cgcgccgccc gcgacaggcc
 180
 aggccagcgg gaaggtgtag acgaacagcc caaaggattc agcagtgtaa gtaccccacc
 240
 tacgcactta caaagtgcag gccaccgccc agccccacct ccagacacag gcggaggcca
 300
 agctcgcggg caccgtatca tcccgtagcg tctccaccct acccctgccca attg
 354

<210> 1920

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1920

Xaa	Gly	Arg	Ser	Cys	Val	His	Cys	Ala	Val	Pro	Ala	Thr	Ser	Ala	Ile
1				5					10					15	
Cys	Leu	Ser	Leu	Pro	Gly	Cys	Ser	His	Pro	Ser	Cys	Thr	Ala	Glu	Ala
			20					25					30		
Trp	Pro	Arg	Ala	Ser	Arg	Pro	Arg	Pro	Pro	Pro	Ser	Ser	Leu	Pro	Leu
			35				40					45			
Thr	Lys	His	Trp	Glu	Pro	Ala	Arg	Pro	Arg	Gln	Ala	Arg	Pro	Ala	Gly
	50					55				60					
Arg	Cys	Arg	Arg	Thr	Ala	Gln	Arg	Ile	Gln	Gln	Cys	Lys	Tyr	Pro	Thr
65					70					75				80	
Tyr	Ala	Leu	Thr	Lys	Cys	Arg	Pro	Pro	Pro	Ser	Pro	Thr	Ser	Arg	His
				85					90					95	
Arg	Arg	Arg	Pro	Ser	Ser	Arg	Ala	Pro	Tyr	His	Pro	Val	Pro	Ser	Pro
			100					105					110		
Pro	Tyr	Pro	Cys	Gln	Leu										
															115

<210> 1921

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcatct ggaggcagag agatggggaa gcgggtggga gaagagcaag aacggaaact
 60
 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac
 120
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgaggtgc
 180
 aggtgccact ccacagccgt gggcagacct gggagcccag ctctcctgg tttcaccctc
 240
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct cccagatgac
 300
 ttcattgtggg gacaggagaa ctacagatca tggctgagaa gggcgcngtg tngtcca
 357

<210> 1922

<211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1922
 Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly
 1 5 10 15
 Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg
 20 25 30
 Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro
 35 40 45
 Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser
 50 55 60
 Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn
 65 70 75 80
 Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro
 85 90

<210> 1923
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 1923
 nattnaatta tggtagaaaa aggcttatgc gttgcattgc tcgtgcttgt cacactgtca
 60
 ggtagtgcac agaagaaaga atgggttcagc aacattaaac tctcaggcta tggaatgacc
 120
 cagtatcaat atactgatca agagggaagc aaaggccatt catttaatct gcgattgttc
 180
 ccgttgccctt taaacggacg tatcttaaatt gactttttatt ggaaggcaca ggcccaattc
 240
 aatggaaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg
 300
 cagaaatatg attattttcaa ggtgaagtta ggccagttta agcgaccatt cacgtttgaa
 360
 aatcccag
 368

<210> 1924
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1924
 Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu
 1 5 10 15
 Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser
 20 25 30
 Gly Tyr Gly Met Thr Gln Tyr Gln Tyr Thr Asp Gln Glu Gly Ser Lys
 35 40 45
 Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg
 50 55 60
 Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn


```

65              70              75              80
Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu
      85              90              95
Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg
      100            105            110
Pro Phe Thr Phe Glu Asn Pro
      115

```

<210> 1925
 <211> 427
 <212> DNA
 <213> Homo sapiens

```

<400> 1925
actagtgttt ccagcaggca gcgatttaat tgttcttgca ttgaaaccca gtgtggcaag
60
ccccctgtg atttgaggct aatccctccc caccctgttc tggcacatgt gcggtgcccc
120
gggctcccc caggctgtga gcagataaag cctgcgtgg cttcacaaca gtgactgggt
180
ctgagaaaca ggtccttgta caagcgacag ggagtgtctc caccagatgt ggcagccct
240
ccacgccagg ctgtgtgggt cagccgcctg gtatatgtgt ccatcgctga tgaaaacagc
300
gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta
360
aaacaacacc atccacgtct ggttccttag agcaaatgga agcaccaggc tctggtgcac
420
ggcgcgc
427

```

<210> 1926
 <211> 104
 <212> PRT
 <213> Homo sapiens

```

<400> 1926
Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg
 1              5              10              15
Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val
      20              25              30
Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His
      35              40              45
Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser
      50              55              60
Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu
65              70              75              80
Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu
      85              90              95
Asn Arg Cys Leu Leu Glu Thr Leu
      100

```

<210> 1927
 <211> 516

<212> DNA

<213> Homo sapiens

<400> 1927

nntctagaag actccaccta cttttcccca gactttcagc tctattctgg gaggcacgaa
 60
 acatctgctt tgacggtgga ggcaaccagt agcatcaggg aaaaagttgt tgaagatcct
 120
 ctttgtaact tccactcccc aaacttcctg aggatctcag aggtggaaat gagaggttcc
 180
 gaggatgcgg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc
 240
 accccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gagtgcagga
 300
 ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcaactcaaga agaccacaaa
 360
 atggtctacc agtcagcacg ccaagaaccg cagggtcaag aacaccagng tgganncaat
 420
 acggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc
 480
 acttacgagg aggccaaagc acagcccttc acgcgt
 516

<210> 1928

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1928

Xaa	Leu	Glu	Asp	Ser	Thr	Tyr	Phe	Ser	Pro	Asp	Phe	Gln	Leu	Tyr	Ser
1				5					10					15	
Gly	Arg	His	Glu	Thr	Ser	Ala	Leu	Thr	Val	Glu	Ala	Thr	Ser	Ser	Ile
			20					25					30		
Arg	Glu	Lys	Val	Val	Glu	Asp	Pro	Leu	Cys	Asn	Phe	His	Ser	Pro	Asn
		35				40					45				
Phe	Leu	Arg	Ile	Ser	Glu	Val	Glu	Met	Arg	Gly	Ser	Glu	Asp	Ala	Ala
	50					55				60					
Ala	Gly	Thr	Val	Leu	Gln	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly
65					70				75					80	
Thr	Pro	Thr	Glu	Asn	Met	Asn	Leu	Leu	Ala	Ile	Gln	His	Gln	Ala	Thr
			85					90					95		
Gly	Ser	Ala	Gly	Pro	Ala	His	Pro	Thr	Asn	Asn	Phe	Ser	Ser	Thr	Glu
		100						105					110		
Asn	Leu	Thr	Gln	Glu	Asp	Pro	Gln	Met	Val	Tyr	Gln	Ser	Ala	Arg	Gln
		115					120					125			
Glu	Pro	Gln	Gly	Gln	Glu	His	Gln	Xaa	Gly	Xaa	Asn	Thr	Val	Met	Glu
	130					135					140				
Lys	Gln	Val	Arg	Ser	Thr	Gln	Pro	Gln	Gln	Asn	Asn	Glu	Glu	Leu	Pro
145					150					155				160	
Thr	Tyr	Glu	Glu	Ala	Lys	Ala	Gln	Pro	Phe	Thr	Arg				
			165					170							

<210> 1929

<211> 843

<212> DNA

<213> Homo sapiens

<400> 1929

```

nnccgcgac actcagggtc tgggggtccct cttccccaag aggcctgact gcctgggtgt
60
tctccaggta catgtccttc aaggagaaat acacttcctg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgcccacag cagaggctgg cttcctggta ctatctgtgc
180
cagaggaccc aggccccctg gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacggggcc ctgagtccca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcacctg cttggattcc
360
tcatttttct ttttcttctt ggccccactc tcctctttga gggctctctg aggccccagc
420
tccatggcgt cacagatgta tgtcagcaag ccatgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttggtggt cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtgtgagc agtctcagtc tctccctcct gccaaagccgc cagggtccca cctcagggt
600
ccctggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc ttctgctgga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctccc aggcaccgcc ttctcgtgct
720
tccagctctg ctgatctcg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgtggtg gatcttgtag tcagtcatgg tgcccacctc ccaggacct gagcaggaca
840
caa
843

```

<210> 1930

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1930

```

Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1          5          10          15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
20          25          30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
35          40          45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
50          55          60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
65          70          75          80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
85          90          95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

```


100 105 110
 Pro Leu Ser Ser Leu Arg Ala Leu
 115 120

<210> 1931
 <211> 719
 <212> DNA
 <213> Homo sapiens

<400> 1931
 acgcgtaggc ctgagccgct ccacagccct ggggagggca gaaaaggagg aaagtaggca
 60
 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tggaagcgga agggagcact
 120
 gaagaggagg tggtagtggt tgtcagaagc tgctgagaag ccagttagat aaagcggaga
 180
 agcttcctac taggacagct tcctcccagc ccagtgtggc cacgctgggtg tcctcgggtga
 240
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcggctc
 300
 acgaggctga ctttggaac aggaggtccg tgggtcgtgg aataagaaag ggcatcatgg
 360
 ttgcagagga agggaaggaa gccacaggct gccttgggga gctttctgaa aggcaggctc
 420
 gatcatgcct ctctgggcta cgggtctctc acgggtggctc ctggttgga ctgaagtggg
 480
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg gcggccccag
 540
 cagggtgccc cccttgcaac acttcttttc ccacatgac gtgccttcca aacctacttc
 600
 cagegtgccc ctcttcaggg agcctttcat aaccacctct cccttcact ggctaaagat
 660
 gaggttgagc aactgcagga cttgggacct tggtcctgcc cctgtggctg cctggatcc
 719

<210> 1932
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1932
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr
 1 5 10 15
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp
 20 25 30
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe
 35 40 45
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe
 50 55 60
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg
 65 70 75 80
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala
 85 90 95
 Trp Ile

<210> 1933
 <211> 295
 <212> DNA
 <213> Homo sapiens

<400> 1933
 ggcgccgagc tgtgggcggc catggagcgc atgcctgccg acctgattat cctcgacctg
 60
 atgctgccgg gggataacgg cctcttgetg tgccagcgcc tgcgccagca atacgcaaca
 120
 ccagtgatca tgctgaccgc catgggcgaa ctgagtgatc gcgtgggggg cctggaaatg
 180
 ggcgccgatg actacctgaa caaacctttc gatgcccgctg aattacttgc ccgggtgcgc
 240
 gctgtactgc gtcggcgctg tgaaaaccga ccgacgttgg gcgacgtgtc gcgcc
 295

<210> 1934
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1934
 Gly Ala Glu Leu Trp Ala Ala Met Glu Arg Met Pro Ala Asp Leu Ile
 1 5 10 15
 Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln
 20 25 30
 Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met
 35 40 45
 Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp
 50 55 60
 Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg
 65 70 75 80
 Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val
 85 90 95
 Ser Arg

<210> 1935
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 1935
 accggtgtgg cgggcgcggc cttcaccacc atcggtccca ccgggcccgc ggcggttcg
 60
 caatacatcg tcgatacctt cctggtagtg gtgttcgggg gggcccaaag cctgttcggc
 120
 cccatgcct cggcgttcgt gattgccag acccaatcgc tgcggagtt tttcctcagt
 180
 ggctcgatgg ccaaggtgct gaccttgtcg tcggtgattc tgatcctgat gctgcgccg
 240

caagggttgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg tttaagca
298

<210> 1936

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1936

Thr	Gly	Val	Ala	Gly	Ala	Ala	Phe	Thr	Thr	Ile	Gly	Ser	Thr	Gly	Pro
1				5				10						15	
Thr	Ala	Gly	Ser	Gln	Tyr	Ile	Val	Asp	Thr	Phe	Leu	Val	Val	Val	Phe
			20					25					30		
Gly	Gly	Ala	Gln	Ser	Leu	Phe	Gly	Pro	Ile	Ala	Ser	Ala	Phe	Val	Ile
		35					40					45			
Ala	Gln	Thr	Gln	Ser	Leu	Ser	Glu	Phe	Phe	Leu	Ser	Gly	Ser	Met	Ala
	50					55					60				
Lys	Val	Leu	Thr	Leu	Ser	Val	Ile	Leu	Ile	Leu	Met	Leu	Arg	Pro	
65				70				75					80		
Gln	Gly	Leu	Phe	Ser	Ile	Lys	Val	Arg	Lys						
			85					90							

<210> 1937

<211> 513

<212> DNA

<213> Homo sapiens

<400> 1937

gcacggcgca cagtaacacc aactcgaaag agaccttatg aatgcaaggt gtgcgggaaa
60
gcctttaatt ctcccaattt atttcaaadc catcaaagaa ctcacactgg aaagaggtcc
120
tataaatgta gggaaatagt gagagccttc acagtttcca gtttctttcg aaaacatgga
180
aaaatgcata ctggagaaaa acgctatgaa tgtaaatact gtggaaaacc tatcgattat
240
cccagtttat ttcaaattca tgtagaact cactctggag aaaaacccta caaatgtaaa
300
caatgtggta aagccttcat ttccgcaggt tacgttcgga cacatgaaat cagatctcac
360
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc
420
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac
480
caagtcttta gatgtccac gtcccttcac gcg
513

<210> 1938

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1938

Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

1	5	10	15
Val Cys Gly Lys	Ala Phe Asn Ser	Pro Asn Leu Phe	Gln Ile His Gln
20	25	30	
Arg Thr His Thr	Gly Lys Arg Ser	Tyr Lys Cys Arg	Glu Ile Val Arg
35	40	45	
Ala Phe Thr Val	Ser Ser Phe Phe	Arg Lys His Gly	Lys Met His Thr
50	55	60	
Gly Glu Lys Arg	Tyr Glu Cys Lys	Tyr Cys Gly Lys	Pro Ile Asp Tyr
65	70	75	80
Pro Ser Leu Phe	Gln Ile His Val	Arg Thr His Ser	Gly Glu Lys Pro
85	90	95	
Tyr Lys Cys Lys	Gln Cys Gly Lys	Ala Phe Ile Ser	Ala Gly Tyr Val
100	105	110	
Arg Thr His Glu	Ile Arg Ser His	Ala Leu Glu Lys	Ser His Gln Cys
115	120	125	
Gln Glu Cys Gly	Lys Lys Leu Ser	Cys Ser Ser Ser	Leu His Arg His
130	135	140	
Glu Arg Thr His	Ser Gly Gly Lys	Leu Tyr Glu Cys	Gln Lys Cys Asp
145	150	155	160
Gln Val Phe Arg	Cys Pro Thr Ser	Leu His Ala	
165	170		

<210> 1939

<211> 1233

<212> DNA

<213> Homo sapiens

<400> 1939

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gccggcagcg cgcgtcccca gggagggagt ccgcagcctg aggtcttctc caagaaaaaa
60
aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgagggtgcc aagcatcatg ctgttgatg tcctgtacag atgggatgtc agctcctttt
180
tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta ggttatatct taagtgtggt gctgctaaca ttgccagge
300
agcatctggg tcagctttat ctatattttt tgactgctct gctcctctat gctggacatc
360
aaatttccag ggactatggt cggagtgaac tggggtttgc ctatgagggg ccaatgtatt
420
tagaacctct ctctatgaat cggtttacca cagccttaat aggtcagttg gtggtgtgta
480
ctttatgctc ctgtgtcatg aaaacaaagc agatttggct gttttcagct cacatgcttc
540
ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagtctctc attttcttgg gtctaattct ttggtacctt
660
ataaccttgc taaatctgca tacagagaat tggttcaggt agtggaggta tatggccttc
720
tcgccttggg aatgtccctg tggaatcaac tggtagtccc tggtcttttc atgggtttct
780

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ggctcgtctt atttgctctt cagatttact cctatttcag tactcgagat cagcctgcat
 840
 cacgtgagag gcttcttttc ctttttctga caaggtaatt aataagagcc tatgatacta
 900
 tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt
 960
 tatcgttcat gttacacaac ttcgtatttt gttaagatag gattttcatt cactggatac
 1020
 ctaggtttgg caatgcagag aggtgctaac ataataatgt ggtttatttg gctgcactat
 1080
 ggaccagagt gtagcaaatg atttgtggaa aggtacatag cacatcgtaa aagtattttt
 1140
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt
 1200
 tattgagtat tttaaagtga ccataccatt naa
 1233

<210> 1940

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg
1			5						10					15	
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser
			20					25					30		
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu
			35				40					45			
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile
			50			55					60				
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu
65					70					75					80
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile
			85					90						95	
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro
			100					105					110		
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile
			115					120					125		
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys
			130				135					140			
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu
145					150					155					160
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met
			165						170					175	
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu
			180					185					190		
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val
			195				200						205		
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln
			210				215					220			
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala
225					230					235					240
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg

245 250 255
 Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg
 260 265

```
<210> 1941
<211> 411
<212> DNA
<213> Homo sapiens
```

```
<400> 1941
ctggggccct gccccacagc atcatgatgg ggaaactccc cctgggggtc gtctcccctt
60
atgtgaagat gagttcgggg ggctacacgg accccctgaa attctacgcc accagctact
120
gcacagccta cggtcggggag gatttcaagc cccgtgtggg cagtcacgta ggcaccggct
180
acaaatcaaa tttccagccc gtggtctcat gccaaagccag tctggaggcc ttagacaacc
240
cggccagggg ggaacaagcc caggaccatt tccagtctgt ggccagccag agctaccgcc
300
ccctggaggt gcctgacggc aagcatcccc tgccctggag catgcgccag accagctcag
360
gctatgggcg ggagaagccc agtgcgggtc cccccaccaa ggaggtccgg a
411
```

```
<210> 1942
<211> 129
<212> PRT
<213> Homo sapiens
```

```

<400> 1942
Met Met Gly Lys Leu Pro Leu Gly Val Val Ser Pro Tyr Val Lys Met
  1                    5                10                15
Ser Ser Gly Gly Tyr Thr Asp Pro Leu Lys Phe Tyr Ala Thr Ser Tyr
      20                25                30
Cys Thr Ala Tyr Gly Arg Glu Asp Phe Lys Pro Arg Val Gly Ser His
      35                40                45
Val Gly Thr Gly Tyr Lys Ser Asn Phe Gln Pro Val Val Ser Cys Gln
      50                55                60
Ala Ser Leu Glu Ala Leu Asp Asn Pro Ala Arg Gly Glu Gln Ala Gln
  65                    70                75                80
Asp His Phe Gln Ser Val Ala Ser Gln Ser Tyr Arg Pro Leu Glu Val
      85                90                95
Pro Asp Gly Lys His Pro Leu Pro Trp Ser Met Arg Gln Thr Ser Ser
      100               105               110
Gly Tyr Gly Arg Glu Lys Pro Ser Ala Gly Pro Pro Thr Lys Glu Val
      115               120               125
Arg

```

```
<210> 1943
<211> 386
<212> DNA
<213> Homo sapiens
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<400> 1943

nagaaacatt cagggctcca acaggggtgga aaacatgagg ctgcaggatg tttacagga
60
gtctttgctg cagctcctct tggagccttt aacgagatac tatcatgcct atgaactgcc
120
acacagatgt acatggcata gcactgcccc aaagtatcag cccaaggaac cctactttcc
180
ccagcaacat ctaactcaga aatgctgatac tttggcctca atctgggtccc aaaatacctc
240
caggggtatct tgggcttcgg tgtgttcaca cacttgggtca tgtaaactctg aacacagact
300
ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc
360
ctctgcaatc tcacctgcta gagacg
386

<210> 1944

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
1				5					10				15		
Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20					25					30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
		35				40					45				
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
	50					55					60				
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
65					70					75				80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
				85				90						95	
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
			100					105					110		

<210> 1945

<211> 443

<212> DNA

<213> Homo sapiens

<400> 1945

nacgcgtcac gaagcgcgct cggccccacgt ggctccaagg gcgtccacgc gcccctcctc
60
gaccgattgg tgtcgaacat ggcacgggtgg catgcgacgc gcaccaagat ccagctcaag
120
ctcgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg
180
cgactggaaa ttgcggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtcaaaacc
240
gaatcgctga tcatggacga tatacatttg gagttgcttg aactgcttga gctctactgt
300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg
 360
 atccgcgagc cgatgatcgc cattattcat gcggctcatc gcacagaggt gaaggaacta
 420
 catgtgctcc aaaacatgct gaa
 443

<210> 1946
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1946
 Xaa Ala Ser Arg Ser Ala Leu Gly Pro Arg Gly Ser Lys Gly Val His
 1 5 10 15
 Ala Pro Leu Leu Asn Arg Leu Val Ser Asn Met Ala Arg Trp His Ala
 20 25 30
 Thr Arg Thr Lys Ile Gln Leu Lys Leu Ala Ile Gln Arg Xaa Gly Met
 35 40 45
 Leu Gln Glu Lys Lys Ala Ala Leu His Lys Lys Val Arg Leu Glu Ile
 50 55 60
 Ala Asp Xaa Arg Arg Arg Gln Lys Leu Glu Ser Ala Arg Val Lys Thr
 65 70 75 80
 Glu Ser Leu Ile Met Asp Asp Ile His Leu Glu Leu Leu Glu Leu Leu
 85 90 95
 Glu Leu Tyr Cys Glu Thr Leu Tyr Ala Arg Phe Gly Leu Leu Glu Gly
 100 105 110
 Arg Asp Asn Glu Pro Asp Asp Ala Ile Arg Glu Pro Met Ile Ala Ile
 115 120 125
 Ile His Ala Ala His Arg Thr Glu Val Lys Glu Leu His Val Leu Gln
 130 135 140
 Asn Met Leu
 145

<210> 1947
 <211> 472
 <212> DNA
 <213> Homo sapiens

<400> 1947
 cggccgtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgtg taggcgggag
 60
 gactgtgccg caggtgcagg agggtcagat ggaaacaaaa ggcgcaggcg gcctccacaa
 120
 gcgccccgtg gggcacggat gtgcgcaggg ccgagctgca gctctgggcc atgaggctct
 180
 gcagcaggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg
 240
 cctgcatgcc cagcccctgt gccgccagct tcagcagcgt gccaggcaga gactcctcgg
 300
 ccatgaggaa ctccctgcagg gacacgggtgg gggtggccga ggccccgtcc aaggtgaccc
 360
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtccccag
 420

cccagggccc gagctcgaac agcgtcctca tctccaggaa gcaggccccg ag
472

<210> 1948

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1948

Met	Arg	Thr	Leu	Phe	Glu	Leu	Gly	Pro	Trp	Ala	Gly	Asp	Phe	Gly	Pro
1				5				10						15	
Asp	Leu	Leu	Leu	Thr	Leu	Leu	Phe	Leu	Leu	Phe	Leu	Ala	His	Gly	Val
			20					25					30		
Thr	Leu	Asp	Gly	Ala	Ser	Ala	Asn	Pro	Thr	Val	Ser	Leu	Gln	Glu	Phe
		35					40					45			
Leu	Met	Ala	Glu	Glu	Ser	Leu	Pro	Gly	Thr	Leu	Leu	Lys	Leu	Ala	Ala
	50					55					60				
Gln	Gly	Leu	Gly	Met	Gln	Ala	Ala	Cys	Thr	Leu	Thr	Arg	Leu	Cys	Trp
65					70					75				80	
Ala	Trp	Glu	Leu	Ser	Asp	Leu	His	Leu	Leu	Gln	Ser	Leu	Met	Ala	Gln
				85					90					95	
Ser	Cys	Ser	Ser	Ala	Leu	Arg	Thr	Ser	Val	Pro	His	Gly	Ala	Leu	Val
			100					105					110		
Glu	Ala	Ala	Cys	Ala	Phe	Cys	Phe	His	Leu	Thr	Leu	Leu	His	Leu	Arg
		115					120					125			
His	Ser	Pro	Pro	Ala	Tyr	Ser	Gly	Pro	Ala	Val	Ala	Leu	Leu	Val	Thr
	130					135						140			
Val	Thr	Ala	Tyr	Thr	Ala										
145					150										

<210> 1949

<211> 395

<212> DNA

<213> Homo sapiens

<400> 1949

acgcgttgag ggaggcgaca tgcttcatga gcgcttgagg ccactgctca agcgacatct
60
gccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct
120
ccggatgcct cgacgggacg ctcaacaagct tccattggcc attcgcgggg cgcttggtct
180
cgaccgcgcg tacaaccggg tctacatggt cgccatgcc aatggcattc
240
cacagtacgc gcagcggccg tcgtatttgc gccggagccg atcgcgctgt gctttcgtca
300
gccggctcac gctttatgct ccacggcagg tgtggcagca tcctggcagg cgactccaag
360
atccgcgcct gcgtccagct tgacggcgcc ggggtt
395

<210> 1950

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1950

```

Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
          20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
          35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
          50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
          85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
          100          105          110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
          115          120          125

```

<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

```

cggccgcccgc ctctccgctc ccggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcggaac cggtcgggtg cctcgggata cctgccgcct ctgctgctgc atgccctgct
120
gctcttcgtg gccgacgtg cattcacaga agtccccaaa gatgtgacag tacgggagggg
180
agacgacatc gaaatgccct gcgcgttccg ggccagcgga gccacctcgt attcgctgga
240
gattcagtgg tggtagctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

```

<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

```

Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
          20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
          35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```



```

      50              55              60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
65              70              75              80
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Ala Arg
      85              90              95
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
      100              105              110

```

<210> 1953
 <211> 329
 <212> DNA
 <213> Homo sapiens

```

<400> 1953
acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt
60
gagcgcagcc agattttccg gggtgccgat gcctacgcgg tgtcggacta cgtcaaccag
120
catgtgggca gccactgcat tcgcctgcct cccaagggcc ggccacgggc gagtatcagc
180
catcgcacct ttgccagcct ggacctgtgc cgcacagct acggcgctcc ggtacgggtc
240
acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc
300
tccagctccc gtggtgagga tgacgtggn
329

```

<210> 1954
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1      5      10      15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
      20      25      30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
      35      40      45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
      50      55      60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65      70      75      80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
      85      90      95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
      100      105

```

<210> 1955
 <211> 415
 <212> DNA
 <213> Homo sapiens

<400> 1955

acgcgtggct cgacgaaaac caagtacgag acatgcccga caaggtacta tcacacatgg
60
tggaatactg ctggggggcgc ttcacagaca acatcaaata cgctgtagct gcccaatatt
120
ggaaaggggc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa
180
ccgccaacaa agccatgaac gcagcaaaac aattccactg gaacacccgg ctacaacaac
240
aatggaaaac atggatactc ccagtcacaca acggcaccgt gtccgagttt ttcacccaac
300
aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa
360
acgtcatgtg cggcaaaaaca ctccaccacc aagacgacac catatcgtgg tgcac
415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1				5					10					15	
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
			20					25					30		
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
			35				40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
			50			55					60				
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
65					70					75					80
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
			85						90					95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
			100					105					110		
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
			115				120						125		

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatattt cctaacctct ctccgagctg ctgagccgat cggtgaccac
60
caggagctcc tccctgtgag gacaaagttc cagagtcggg gtcacggggc ttacttattg
120
gggaggaggc ccgccggggc cgcagtgggc gaggggccct tggcgcgctc ctgggaggtc
180
agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggg cgcatttcgc
240
ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcggggcttc tccgcagagt
300

ggggaccctg gggaaggcgc caacttctct cctctgccc cctcactccc cgcgggcgctc
 360
 cctggggcgc ctgcccgggc cgcactgggc ggctccatc gtcccttccc tctacctgca
 420
 ctgccccagg cgggagagag gccttgcccc nncgagggac cagctgcagc gggcagcggg
 480
 gtcctgctcc cccaaccccc gcccatggc acggggctga accggt
 526

<210> 1958
 <211> 175
 <212> PRT
 <213> Homo sapiens

<400> 1958
 Thr Arg Ser Gly Glu Ile Phe Leu Thr Ser Leu Arg Ala Ala Glu Pro
 1 5 10 15
 Ile Gly Asp His Gln Glu Leu Leu Pro Val Arg Thr Lys Phe Gln Ser
 20 25 30
 Arg Gly His Gly Pro Tyr Leu Leu Gly Arg Arg Pro Ala Gly Ala Ala
 35 40 45
 Val Gly Glu Gly Pro Leu Ala Arg Ser Trp Glu Val Arg Pro Gly Thr
 50 55 60
 Val Trp Arg Arg Phe Pro Val Arg Ser Arg Val Glu Gly Ala Phe Arg
 65 70 75 80
 Gly Asp Cys Gln His Glu Pro Gln Pro Thr Glu Phe Cys Asp Arg Ala
 85 90 95
 Ser Pro Gln Ser Gly Asp Pro Gly Glu Gly Ala Asn Phe Ser Pro Leu
 100 105 110
 Pro Thr Ser Leu Pro Ala Gly Val Pro Gly Pro Pro Ala Arg Ala Ala
 115 120 125
 Leu Gly Gly Leu His Arg Pro Phe Pro Leu Pro Ala Leu Pro Gln Ala
 130 135 140
 Gly Glu Arg Pro Trp Pro Xaa Glu Gly Pro Ala Ala Ala Gly Ser Gly
 145 150 155 160
 Val Leu Leu Pro Gln Pro Pro Pro His Gly Thr Gly Leu Asn Arg
 165 170 175

<210> 1959
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 1959
 gtgcaccgga cggctcctcc aacggatcat ggcacggccc agcgggaaggc tcacccgagt
 60
 cgtcagaagg atcagggcgc ttgtcgctgt cagacttcag gacatccac gacatggtga
 120
 acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg
 180
 tgtattttcc ggcattgagt aagaaccagt gggcatgctg atgacccttg atcggcagtg
 240
 aggctccttt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgttct
 300

cgtctgcctc gggatgaattg ccgaggaggt acatcttgcc tggacccgta atcgcggtga
 360
 agtcgacgcg caacgcgt
 378

<210> 1960
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 1960
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu
 1 5 10 15
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser
 20 25 30
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala
 35 40 45
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly
 50 55 60
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys
 65 70 75 80
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro
 85 90 95
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala
 100 105 110

<210> 1961
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 1961
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 120
 aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcacc aggaccacgg
 180
 gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggaggtac
 240
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg
 300
 accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag
 360
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 384

<210> 1962
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1962
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

1	5	10	15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr			
20	25	30	
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg			
35	40	45	
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn			
50	55	60	
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr			
65	70	75	80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser			
85	90	95	
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys			
100	105	110	
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg			
115	120	125	

<210> 1963

<211> 323

<212> DNA

<213> Homo sapiens

<400> 1963

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120
cacagctgcc tggctcttcg gcgtcagtc accaccttct gcagctctcc ctcaccctgg
180
cgaccactca ggcattgcatc tcgcggggccc ccttcagacc tctcgggggc atcttcccct
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323

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<210> 1964

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1964

Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys			
1	5	10	15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val			
20	25	30	
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg			
35	40	45	
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg			
50	55	60	
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro			
65	70	75	80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val			
85	90	95	
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser			

100

105

<210> 1965

<211> 1416

<212> DNA

<213> Homo sapiens

<400> 1965

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120
gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct
180
cgggccctgt cactgacacg ggcactggag gaggagcagg aggcacgtga ggagctggag
240
cggcagaacc gggccctgcg ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc
300
ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat
360
ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg
420
cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt
480
gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgagagggtg
540
gagcgggatg aggagcggaa gcagcgact ctggccgtgg ctgcccga gaagctggag
600
ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg
660
gtgaagcagc ttcgcaagat gcaggcccag atgaaggagc tatggcggga ggtggaggag
720
acacgcacct cccgggagga gatcttctcc cagaatcggg aaagtgaata gcgcctcaag
780
ggcctggagg ctgaggtgct gcggctgcag gaggaactgg ccgcctcgga ccgtgctcgg
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aaggcagcca ttctggagga gaagcgtcag ctggaggggg gcctggggca gttggaggaa
960
gagctggagg aggagcagac anactcagag ctgctcaatg accgctaccg caagctgctc
1020
ctgcaggtag agtcactgac cacagagctg tcagctgagc gcagtttctc agccaaggca
1080
gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag
1140
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1200
gccaggctg aggagcagct agagcaagag accagagagc gcattcctctc tggaaagctg
1260
gtgccccaaa gtaagaagcg gtttaaagag gtggtgctcc aggtggagga ggagcggagg
1320
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1380

cggcagctgg aggaggccga ggaggaggca tccccg
1416

<210> 1966
<211> 472
<212> PRT
<213> Homo sapiens

<400> 1966

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Arg	Gln	Leu	Val	Ser	Thr	Leu	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Asp	Gln
		20						25					30		
Leu	Leu	Ala	Glu	Glu	Lys	Ala	Ala	Val	Leu	Arg	Ala	Val	Glu	Glu	Arg
		35					40					45			
Glu	Arg	Ala	Glu	Ala	Glu	Gly	Arg	Glu	Arg	Glu	Ala	Arg	Ala	Leu	Ser
	50					55					60				
Leu	Thr	Arg	Ala	Leu	Glu	Glu	Gln	Glu	Ala	Arg	Glu	Glu	Leu	Glu	
65					70				75					80	
Arg	Gln	Asn	Arg	Ala	Leu	Arg	Ala	Glu	Leu	Glu	Ala	Leu	Leu	Ser	Ser
			85						90					95	
Lys	Asp	Asp	Val	Gly	Lys	Ser	Val	His	Glu	Leu	Glu	Arg	Ala	Cys	Arg
			100					105					110		
Val	Ala	Glu	Gln	Ala	Ala	Asn	Asp	Leu	Arg	Ala	Gln	Val	Thr	Glu	Leu
		115					120					125			
Glu	Asp	Glu	Leu	Thr	Ala	Ala	Glu	Asp	Ala	Lys	Leu	Arg	Leu	Glu	Val
	130						135				140				
Thr	Val	Gln	Ala	Leu	Lys	Thr	Gln	His	Glu	Arg	Asp	Leu	Gln	Gly	Arg
145					150					155				160	
Asp	Glu	Ala	Gly	Glu	Glu	Arg	Arg	Arg	Gln	Leu	Ala	Lys	Gln	Leu	Arg
			165						170					175	
Asp	Ala	Glu	Val	Glu	Arg	Asp	Glu	Glu	Arg	Lys	Gln	Arg	Thr	Leu	Ala
			180					185					190		
Val	Ala	Ala	Arg	Lys	Lys	Leu	Glu	Gly	Glu	Leu	Glu	Glu	Leu	Lys	Ala
		195					200					205			
Gln	Met	Ala	Ser	Ala	Gly	Gln	Gly	Lys	Glu	Glu	Ala	Val	Lys	Gln	Leu
	210					215					220				
Arg	Lys	Met	Gln	Ala	Gln	Met	Lys	Glu	Leu	Trp	Arg	Glu	Val	Glu	Glu
225					230					235				240	
Thr	Arg	Thr	Ser	Arg	Glu	Glu	Ile	Phe	Ser	Gln	Asn	Arg	Glu	Ser	Glu
			245						250					255	
Lys	Arg	Leu	Lys	Gly	Leu	Glu	Ala	Glu	Val	Leu	Arg	Leu	Gln	Glu	Glu
		260						265					270		
Leu	Ala	Ala	Ser	Asp	Arg	Ala	Arg	Arg	Gln	Ala	Gln	Gln	Asp	Arg	Asp
		275					280					285			
Glu	Met	Ala	Asp	Glu	Val	Ala	Asn	Gly	Asn	Leu	Ser	Lys	Ala	Ala	Ile
	290					295					300				
Leu	Glu	Glu	Lys	Arg	Gln	Leu	Glu	Gly	Arg	Leu	Gly	Gln	Leu	Glu	Glu
305					310					315				320	
Glu	Leu	Glu	Glu	Glu	Gln	Thr	Xaa	Ser	Glu	Leu	Leu	Asn	Asp	Arg	Tyr
			325						330					335	
Arg	Lys	Leu	Leu	Gln	Val	Glu	Ser	Leu	Thr	Thr	Glu	Leu	Ser	Ala	
		340						345				350			
Glu	Arg	Ser	Phe	Ser	Ala	Lys	Ala	Glu	Ser	Gly	Arg	Gln	Gln	Leu	Glu


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          355          360          365
Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
   370          375          380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
385          390          395          400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
          405          410          415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
          420          425          430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
          435          440          445
Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
          450          455          460
Glu Ala Glu Glu Glu Ala Ser Arg
465          470

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<210> 1967

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1967

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120
tgcacacat ctgcgggcca gtcagctccc ctgggcttgc actcgtcgga gatgctggcc
180
ttgcaccaga tctctgtgg ggcgtcgggt gtggctgggc attccagtcg gcagcttggt
240
tagtgactg taccggatct catttgctg accggaccgc cttagatagg gcgcttcgca
300
gttatcatcg ataccaccgg cattctcttg ggtggcatga acgcctcatc tctagatatg
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401

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<210> 1968

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1968

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Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val
  1          5          10          15
Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
          20          25          30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
          35          40          45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
          50          55          60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
65          70          75          80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

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85

90

<210> 1969

<211> 464

<212> DNA

<213> Homo sapiens

<400> 1969

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120
caggtcatgg cgaccagcg tgatctcaaa ccgtcagtat tcgtcaacct ctctctctcg
180
gaaggacttc ctgtatcaat gatggagggt gcttccctcg gtatcccat tatcgcgact
240
ggcgctggcg gagtaggaga aatcgtctcg tctgacaacg ggcattctatt gcctgccgag
300
ttcaccgaca ccagggcgc tgacgcgtta gtgcagctgg cacgtctgtc tgaggacgag
360
taccagcagg tgtgtcaggc ctcccgccag gtgtgggaag aaaagttccg cgcctctgtc
420
gtctaccccg aattctgtcg cgagtgtctg ggcgacgtg atca
464

<210> 1970

<211> 154

<212> PRT

<213> Homo sapiens

<400> 1970

Xaa	Ile	Asp	Ala	His	Trp	Thr	His	Leu	Gly	Asp	Gly	Pro	Gln	Met	Asp
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Thr	Leu	Arg	Glu	Glu	Val	Ala	Val	His	Arg	Val	Thr	Asp	Ala	Val	Thr
			20						25					30	
Leu	Leu	Gly	His	Val	Ala	Asn	Thr	Gln	Val	Met	Ala	Thr	Gln	Arg	Asp
			35						40					45	
Leu	Lys	Pro	Ser	Val	Phe	Val	Asn	Leu	Ser	Ser	Ser	Glu	Gly	Leu	Pro
	50						55					60			
Val	Ser	Met	Met	Glu	Val	Ala	Ser	Leu	Gly	Ile	Pro	Ile	Ile	Ala	Thr
65						70				75				80	
Gly	Val	Gly	Gly	Val	Gly	Glu	Ile	Val	Ser	Ser	Asp	Asn	Gly	His	Leu
				85					90					95	
Leu	Pro	Ala	Glu	Phe	Thr	Asp	Thr	Gln	Ala	Ser	Asp	Ala	Leu	Val	Gln
			100						105					110	
Leu	Ala	Arg	Leu	Ser	Glu	Asp	Glu	Tyr	Gln	Gln	Val	Cys	Gln	Ala	Ser
		115					120					125			
Arg	Gln	Val	Trp	Glu	Glu	Lys	Phe	Arg	Ala	Ser	Val	Val	Tyr	Pro	Glu
	130					135						140			
Phe	Cys	Arg	Glu	Cys	Trp	Gly	Asp	Ala	Asp						
145					150										

<210> 1971

<211> 520

<212> DNA

<213> Homo sapiens

<400> 1971

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 120
 acagacgacg acaaaaaaca ttagagcatc agttgatata atacaaatgg aatataatgc
 180
 atctaacatt tcaaattcaa gacatgattc tgatgaaatc agtggtaaaa tgaatacata
 240
 tatgaattct acgacttcta agaaggatac tgggtgtgcaa acagatgact taaatatagg
 300
 aatattcacc aatgcagaat cacattgtgg atcattaatg gagagggaca tcacaaattg
 360
 ttcattctct gagatttcgg cagaacttat tggacagttt agcaccaaga aaaacaagca
 420
 agaactaact caggataaag gagccagctt agaaaaagaa aacaatcggg gtaatgacca
 480
 gtgtaatcag ttcacaagaa ttgagaaaca aacaaaacag
 520

<210> 1972

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1972

Met	Glu	Tyr	Asn	Ala	Ser	Asn	Ile	Ser	Asn	Ser	Arg	His	Asp	Ser	Asp
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Glu	Ile	Ser	Gly	Lys	Met	Asn	Thr	Tyr	Met	Asn	Ser	Thr	Thr	Ser	Lys
			20					25					30		
Lys	Asp	Thr	Gly	Val	Gln	Thr	Asp	Asp	Leu	Asn	Ile	Gly	Ile	Phe	Thr
		35					40					45			
Asn	Ala	Glu	Ser	His	Cys	Gly	Ser	Leu	Met	Glu	Arg	Asp	Ile	Thr	Asn
		50				55					60				
Cys	Ser	Ser	Pro	Glu	Ile	Ser	Ala	Glu	Leu	Ile	Gly	Gln	Phe	Ser	Thr
65					70					75				80	
Lys	Lys	Asn	Lys	Gln	Glu	Leu	Thr	Gln	Asp	Lys	Gly	Ala	Ser	Leu	Glu
			85					90						95	
Lys	Glu	Asn	Asn	Arg	Cys	Asn	Asp	Gln	Cys	Asn	Gln	Phe	Thr	Arg	Ile
			100					105						110	
Glu	Lys	Gln	Thr	Lys	Gln										
															115

<210> 1973

<211> 331

<212> DNA

<213> Homo sapiens

<400> 1973

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 120
 gagctacaag cgatgaacag cgatactcgc ttcaccacga gcgtgggaat cgacctatcc
 180
 cccgctcgat ctttctccgc ttggggcgctg cgcggaacga ctttttctgc gccgtcgatg
 240
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 300
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 331

<210> 1974

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1974

Met	Ala	Asp	Gln	Leu	Thr	Ala	Ala	Leu	Gly	Ser	Tyr	Leu	Ser	Ala	Gly
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Gln	Lys	Lys	Ser	Asp	Gly	Leu	Gly	Ser	Phe	Phe	Val	Ala	Thr	Thr	Leu
		20						25					30		
Glu	Glu	Leu	Gln	Ala	Met	Asn	Ser	Asp	Thr	Arg	Phe	Thr	Thr	Ser	Val
		35				40						45			
Gly	Ile	Asp	Leu	Ser	Pro	Ala	Arg	Ser	Phe	Ser	Ala	Trp	Ala	Leu	Arg
	50					55				60					
Gly	Thr	Thr	Phe	Ser	Ala	Pro	Ser	Met	Thr	Lys	Ala	Ser	Arg	Ser	Ser
65					70					75				80	
Ser	Ala	Ala	Pro	Ser	Ala	Pro	Arg	Arg	Cys	Gly	Lys	Ser	Trp	Arg	Ser
			85					90						95	
Pro	Pro	Val	Lys	Ser	Cys	Ala									
			100												

<210> 1975

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1975

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 120
 agaaggcggg tgccgacacg gcgagccgtc agcaggagat ttgcatgctg ctggcgacaga
 180
 ctgcgcgcga catctcttcg caaacacagg cccacgccaa caacacgata gccgagattt
 240
 ctcgactggt gcaggccgcc tcggaggcgc caaaggctgc tgccgaagtg gttgccgagc
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 360
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 370

<210> 1976

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1976

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Met Arg Val Arg Ser Ser Ser Ile Ala Arg Val Ala Asp His Ala Val
 1           5           10           15
Gly Gln Leu Leu Ala Gln Leu Gly Asn His Phe Gly Ser Ser Leu Trp
      20           25           30
Arg Leu Arg Gly Gly Leu His Gln Ser Arg Asn Leu Gly Asp Arg Val
      35           40           45
Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg
      50           55           60
Gln Arg Ile Ala Asn Leu Leu Leu Thr Ala Arg Arg Val Gly Thr Arg
65           70           75           80
Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile
      85           90           95
Gly Pro Ser Arg Gln Thr Leu Leu Val Ala Gly Leu Gln Arg Gly Leu
      100          105          110
Gln Leu His Glu Arg Leu Ala Arg Arg
      115          120

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<210> 1977

<211> 551

<212> DNA

<213> Homo sapiens

<400> 1977

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120
agagaggaga caggcagcca ggctgttaca caggaggagg cacaggaggt gcacgggagg
180
agccaagcgg gagggcaggc aatggccagg ttggaagatc tgcacctccc tggttactgg
240
aggaatgaaa ctggttggac tgactgcagg gagaggctcc agttgaaaca tgagagaagt
300
actggatgaa aaaggtgcca caactgagac cagaaggcag attcctgaac tgggtggggtg
360
ccaaggatgc atatcaaaga ctgctggaac atgtgggtat caagattgaa gacagtgaag
420
gttaaaatgg cctgatccaa agctggaggg ggggtggagt gactggtgac tgctcttccc
480
acggacaggc attcaggcaa gctttcaaac tgagctctaa attctgctct gggtttctaag
540
cagactcatg a
551

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<210> 1978

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1978

Met His Pro Trp His Pro Thr Ser Ser Gly Ile Cys Leu Leu Val Ser
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 20 25 30
 Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
 35 40 45
 Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
 50 55 60
 Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
 65 70 75 80
 Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala
 85 90 95
 Gln Pro Thr Ser Ser
 100

<210> 1979

<211> 5530

<212> DNA

<213> Homo sapiens

<400> 1979

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 120
 actatgctgc tcgggtgggc gtccctgctg ctgtgcgcgt tccgcctgcc cctggccgcg
 180
 gtcggccccc cgcgcacacc tgcccaggat aaagccgggc agcctccgac tgctgcagca
 240
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 300
 caccgcacc ccttggcgca gcggcgcagg agcaaggggc tgggtgcagaa catcgaccaa
 360
 ctctactccg gcggcggcaa ggtgggttac ctctgtctac cgggcgggcg gaggttcctc
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 720
 tcgaggccct gccgcccgc gccagctgcg aaacccccgc gtccacaccg gagggccacg
 780
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 840
 cagtccgctc tctcgcccgc tgggggtca ggaccgcaga cgtgggtggc gcggcggcgc
 900
 cgctccatct cccgggcccc ccaggtggag ctgcttctgg tggtgacgc gtccatggcg
 960

cggttgatg gccggggcct gcagcattac ctgctgaccc tggcctccat cgccaatagg
1020
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1080
ctaggcgaca aggacaagag cctggaagtg agcaagaacg ctgccaccac actcaagaac
1140
ttttgcaagt ggcagcacca acacaaccag ctgggagatg accatgagga gcactacgat
1200
gcagctatcc tgtttactcg ggaggattta tgtgggcatc attcatgtga caccctggga
1260
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<210> 1980

<211> 929

<212> PRT

<213> Homo sapiens

<400> 1980

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Gln Pro Pro Thr Ala Ala Ala Ala Ala Gln Pro Arg Arg Arg Gln Gly			
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Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu			
50	55	60	
Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu			
65	70	75	80
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg			
85	90	95	
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly			
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Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser			
115	120	125	
His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala			
130	135	140	
Val Phe Asp Leu Cys Gly Gly Leu Asp Gly Phe Phe Ala Val Lys His			
145	150	155	160
Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu			
165	170	175	
Glu Lys Gly Arg Val Tyr Gly Asp Gly Ser Ala Arg Ile Leu His Val			
180	185	190	
Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala			
195	200	205	
Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg			
210	215	220	
Thr Ala Thr Arg Ala Asp Ala Gln His Ala Ser Gln Leu Leu Asp Gln			
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Arg Arg Arg Arg Ser Ile Ser Arg Ala Arg Gln Val Glu Leu Leu Leu			
260	265	270	
Val Ala Asp Ala Ser Met Ala Arg Leu Tyr Gly Arg Gly Leu Gln His			
275	280	285	
Tyr Leu Leu Thr Leu Ala Ser Ile Ala Asn Arg Leu Tyr Ser His Ala			
290	295	300	
Ser Ile Glu Asn His Ile Arg Leu Ala Val Val Lys Val Val Val Leu			
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Gly Asp Lys Asp Lys Ser Leu Glu Val Ser Lys Asn Ala Ala Thr Thr			
325	330	335	
Leu Lys Asn Phe Cys Lys Trp Gln His Gln His Asn Gln Leu Gly Asp			
340	345	350	
Asp His Glu Glu His Tyr Asp Ala Ala Ile Leu Phe Thr Arg Glu Asp			
355	360	365	
Leu Cys Gly His His Ser Cys Asp Thr Leu Gly Met Ala Asp Val Gly			
370	375	380	
Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly			
385	390	395	400
Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly			
405	410	415	
Leu Ser His Asp Ser Lys Phe Cys Glu Glu Thr Phe Gly Ser Thr			
420	425	430	
Glu Asp Lys Arg Leu Met Ser Ser Ile Leu Thr Ser Ile Asp Ala Ser			

Lys	Pro	Trp	Ser	Lys	Cys	Thr	Ser	Ala	Thr	Ile	Thr	Glu	Phe	Leu	Asp	
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Cys	Ala	Arg	Leu	Trp	Cys	Ala	Val	Val	Arg	Gln	Gly	Gln	Met	Val	Cys	
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Arg	Ile	Cys	Leu	Gln	Gly	Lys	Cys	Val	Asp	Lys	Thr	Lys	Lys	Lys	Tyr	
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Gln	Cys	Ser	Arg	Ser	Cys	Gly	Gly	Gly	Val	Gln	Phe	Ala	Tyr	Arg	His	
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Cys	Asn	Asn	Pro	Ala	Pro	Arg	Asn	Asn	Gly	Arg	Tyr	Cys	Thr	Gly	Lys	
		595					600					605				
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				645					650						655	
Gly	Val	Leu	Pro	Ala	Asp	Val	Cys	Lys	Leu	Thr	Cys	Arg	Ala	Lys	Gly	
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		675					680					685				
Cys	Arg	Pro	Tyr	Ser	Asn	Ser	Val	Cys	Val	Arg	Gly	Lys	Cys	Val	Arg	
	690					695					700					
Thr	Gly	Cys	Asp	Gly	Ile	Ile	Gly	Ser	Lys	Leu	Gln	Tyr	Asp	Lys	Cys	
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Phe	Asn	Lys	Lys	Ser	Lys	Gly	Tyr	Thr	Asp	Val	Val	Arg	Ile	Pro	Glu	
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 Arg Thr Val Gln Cys Gln Asp Gly Asn Arg Lys Leu Ala Lys Gly Cys
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<210> 1981
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 1981
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<210> 1982
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 1982
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 35 40 45
 Ser Pro Pro Lys Ala Ala Gly Gly Gly Arg Cys Pro Gly Pro Cys Arg
 50 55 60
 Ile Met Ala Trp Pro Gly Gln Arg Ala Ser Ser Gly Arg Gly Arg
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<210> 1983
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 1983

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<210> 1984

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1984

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			20					25					30		
Ala	Gln	Pro	Glu	Glu	Arg	Asn	Val	Pro	Lys	Arg	Asp	Ala	Ser	Val	Phe
		35					40					45			
Phe	Ile	Asp	Ile	Ile	Gly	Ser	Thr	Lys	Leu	Ser	Leu	Glu	Tyr	Asp	Ser
	50					55					60				
Tyr	Thr	Val	Val	Asp	Leu	Leu	Asn	Arg	Phe	Tyr	Thr	Ile	Val	Val	Glu
65					70					75				80	
Glu	Val	Asn	Arg	Ala	Gly	Gly	Val	Val	Asn	Lys	Phe	Ala	Gly	Asp	Ala
				85					90					95	
Val	Leu	Ala	Ile	Phe	Asn	Val	Pro	His	Asp	His	Pro	Asp	Pro	Ala	Gly
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<210> 1985

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1985

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<210> 1986
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1986
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 35 40 45
 Leu Asp Arg Ile Lys Gly Tyr Lys Ala Cys Glu Pro Met Trp Gly Pro
 50 55 60
 Gly Gly Arg Pro Thr Thr Phe Ala Arg Pro Phe Ala Asp Thr Arg Val
 65 70 75 80
 Phe Glu Ser Asp Glu Thr Ala Gln Thr Ala Asp Glu Gln Thr Leu Ile
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<210> 1987
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 1987
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 419

<210> 1988
 <211> 139
 <212> PRT